COLMAN'S RURAL WORLD

HORMAN J. COLMAN, EDITORS

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While the RURAL WORLD is published at one dollar a year, it has temporarily allowed old subscribers to send actually NEW OR TRIAL subscribers with their subscriptions at fifty cents a year in order to largely increase the circulation and influence of the paper. This price is the cost of the white paper, sswork, folding, wrapping, mailing and prepaying the postage, saying nothing of any other of the large expenses of maintaining offices, paying salaries and consuch a paper in a large city. Renewals, unless accompanied by one or more NEW subscribers must be at one ubscriptions expire. The month named on the address tag, pasted on each issue, shows the month subscriptions expire, and renewals should be made two or the proprietor to be able to state, in his half century's experience in conducting spreading the light. Some of these, it is thus paper, it has never enjoyed the true, are printed on poor paper, with in and prosperity it now toes. Its circulation is increasing in forward in extending its sphere of influ ence. It will do for others what it is doing for you, so get others to join the great RURAL WORLD army and receive the

MISSOURI AT THE PAN-AMERICAN EXPOSITION.

ouri Board of Com for the Pan-American Exposition appointville, treasurer. Mr. Bell is to have charge of the agricultural exhibit. A Nelson of Lebanon, has been employed by the Board of Commissioners as superintendent of the fruit exhibit. The commissioners are in Buffalo this week arranging for space for exhibits of Missouri and interests. On their return will be opened in St. Louis and the work of preparing the exhibits will be pushed vigorously. The exposition opens May 1, thus giving but one month of time in which to prepare and install the exin which to prepare and install the hibits, if they are to be ready at the openaccomplish the task. Fortunately, thanks to Mr. Nelson, several hundred barrels of selected apples of last year's crop are now in cold storage and available for a fruit exhibit. This will enable the commissioners to make a creditable showing of one of the most important of Missouri's diversified agricultural resources. We are not as 'yet informed regarding the plans

> TIME. The flood of time is setting on,

if the season's labors are to be crowned with full harvests. How to make the best of one's time is a problem that is not considered as carefully as it should be by many. In many cases there is a woe-ful waste of time by downright idling This is not necessarily due to laziness but may be the effect, in part, of the consciousness that, in some particulars, re-sults follow only "the inaudible and noise-less foot of time." The farmer is, per-

clined to the opinion, this based on experience as a farmer boy, a hired man dry days of last of October and first of On a farm and an employer of farm November to work. Then while the hands, that the minutes and hours of a ground is dry there will be no dirt in the partisers will find the RURAL WORLD ing seed that is sure to grow so as to that manure out, no more trouble to feed

save replanting, by having fuel for the house ready and in countiess other ways. Labor unions and competition have com-pelled men in other industrial pursuits to study the problem of how to turn the minutes and seconds to profitable account. while the workman's task is growing

AGRICULTURAL ADVANCEMENT.

Editor RURAL WORLD: In the great dvancement this country is making the rural free mail delivery is one of the most portant features and is being rapidly

extended all over the country.

At the end of the present fiscal year, on July 1, there will be established 4,300 rural free delivery routes. Within the next year this number will be doubled, making in all 8,600 routes. At this rate, in a few years, the service will be extended to alnost every rural district. What a grand thing this will be for the farmers of this country! With the facilities for getting the daily news and the vast number of ollar a year. All names are dropped as periodicals and publications pertaining to every industry and profession, there is indeed but little excuse for ignorance and

All professions, callings, creeds, orders pire, and renewals should be made two or three weeks before, so that names shall cate their cause and advance their inter-ests. The farmers, too, are not lacking in the proprietor to be able to state in his which uphold their interests and aid in ferior type and commonplace articles, while others are just the reverse, with does. Its circulation is increasing in a wonderful degree, and its advertising patrons, many of whom have used its columns for a quarter or a third of a century, are more than pleased with results. Let all our friends units and press. suits. Let all our friends unite and press COLMAN'S RURAL WORLD in quality of and neatness of paper, clearness of print and character of matter printed. It hould be in the home of each and every farmer of whatever class in this state for should its influence be confined to Missouri alone, but its circulation should be extended to every state in the union, which would be vastly benefited by its in-

n this locality, Northwest Missouri, is fair. Wheat is looking well. Spring birds ed by Governor Dockery, met last week are making their appearance, indicative and organized. E. S. Garver, Grant City, was elected president; R. M. Yost, St. Louis, secretary; and C. C. Bell, Boonprefer waiting until the maple buds have greater development. The time of year is now upon us when the condition of our public highways, without the intervention of kind Providence, will be impassable, J. Y. POWELL.

Livingston Co., Mo.

SHREDDED CORN FODDER.

Editor RURAL WORLD: You asked me to write my experiences with shredded corn fodder. As yet it is rather limited, but as I have had nearly 40 years of experience in handling corn and fodder, and that in considerable quantities, and three steps with the march of progress is self
many hands, white and colored, of all ages, from 12 up to 40 years old.

In the beginning permit me to say that terests of the United States have kept that in considerable quantities, and three steps with the march of progress is self
to the manner of hiring men. Forty
ments.

December and began work. I had between 500 and 600 shocks, 16 hills square, 256 hills to the shock, that turned out on an aver-We stand upon its brink,"

When it will be necessary for the farmer to make the best possible use of those portions we call minutes, hours and days to the shock. We used a 12-horse threshif the season's labors are to be crowned with full harvests. How to make the best of onc's time is a problem that is not bear and hask about 19 shocks an hour. One best of onc's time is a problem that is not bear and the garden spots of the globe; our grains for and spots of the globe; our grains for and supply supply to the shock in the fear not."

I have just had a valuable (?) present morning until sundown.

The first year of my service I was 16 to the plow from 4 o'clock in the morning until sundown.

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The portions we call minutes, hours and days of the season's labors are to be crowned with full harvests. How to make the best of one's time is a problem that is not barn, the largest I filled, is 40x40. Two kind. little boys, one 12 years old, the other 14. filled this to the comb of the roof by turn-ing the elbow on the end of the cyclone pipe wherever they wanted the fodder delivered. The machine shelled and sacked about 200 bushels of corn in husking about 2,400 bushels of corn, shelled meas-

force, obliged to wait the coming of the It requires two men to run the shredder.

ing gates so hung that they will open and close quickly, by having tools put in for the calves on the other. "Why," says repair while time was not so important, by having tools in good condition, by havthan with hay in the barn. It beats a hay carrier all hollow in mowing it away; you blow it just where you want it, if that is 25 feet high.

is 25 feet high."

I have an old family mare that has heaves. I haven't heard her cough this winter. The fodder must be sheltered after shredding, as it drinks in all the water that falls and the damage is consider-

able if exposed.

For the average farmer and the climate of Missouri I regard shredded fodder as a great food saver, taking away the disomforts of winter feeding of fodder and in a large degree taking the place of tim-othy hay.

J. L. ERWIN. Callaway Co., Mo.

PEBBLES FROM THE POTOMAC.

States Labor Commissioner Carroll D. Wright: "Aided by machinery, 4,500,000 men turn out a product which would require the labor of nearly 40,000,000 men if produced by hand. In America the advantage derived from machinery is about twice as great as in Europe, so that the actual population of the United States is equal in productive power to 150,000,000 Europeans. With labor saving machinery one generation of men can do the work of four or five generations of hand-work-

DAIRY PRODUCTS .- Mr. R. A. Pearson of the Agricultural Department has gone to Porto Rico with instructions to establish agencies there for American dairy products. He has taken samples along with him and will remain long dairy products. He has taken samples along with him and will remain long enough to observe their introduction. The department will endeavor to establish markets for this industry in that section markets for this wherever practicable.

SPRING.-A stroll through the to-day reminds us that the reign of king winter is nearing dissolution; the sullen and gloomy monarch, with his crown agleam with jewels of ice and snow se lately in evidence, is reluctantly handing over the reins of government to the queen of seasons—gentle spring. Flowers and ferns have decorated the hills and dales in the past and evince a disposition this year to outdo all previous records in wel-coming their most gracious patron. From the hedges nature's orchestra pours forth its entrancing strains of music. Here and there an oak retains a few leaves, brown and withered—leaves so lately imprinted with a thousand tints of autumnal glory; waters rush and roar over the stony path of the eager brook, fearing no more the frowning brow of the late taskmaster or his whip of icy lashes. In viewing thes pleasing prospects the poet's fancy runs riot. Basking in the genial glow of Auro-ra's brightest rays, we hear nature pro-

pation to a gallon to the shock. Early in December I had an opportunity to witness the work of a corn husker and shredder with a cyclone stacker.

I bought a new one about the middle of December and began work. I had between 500 and 600 shocks, 16 hills square, 256 hills to the shock, that turned out on an ayer. everse: our fruits perfume the atmosphere in the first own of my service I was 16.

supply of clothing—cotton and wool.

In the progress of the world's advancement the farmer has been an important factor in the equation of events. In the time of war, like Cincinnatus of old, a force, obliged to wait the coming of the seasons of planting, cultivating and harvesting; he knows that while he sleeps chine, adjust the sack for shelled corn, home on the banks of the Potomac and his corn is growing and that when he goes to town his apple trees do not cease their labors for him. It is not so with the mechanic, the tradesman or the professional man; they must attend to business stops.

It requires two men to run the shredder, time of war, like Cincinnatus of old, a farmer—Washington—left his pleasant home on the banks of the Potomac and he elevator leading ear corn in wagon led the children of the new world within whose breasts blazed the unquenchable would like to know how I managed to the engine. I hauled my shock corn one-flame of liberty, on to a victory unparalled in the annals of ancient or modern history. These men were principally want every hired man reader to remembers to plant the corn, and one man and team and trover.

Yet "Does thou love life, then do not consequence and one to look after the man chine, adjust the sack for shelled corn, home on the banks of the Potomac and led the children of the new world within whose breasts blazed the unquenchable would like to know how I managed to the carned the sack for same with led the children of the new world within whose breasts blazed the unquenchable would like to know how I managed to the children of the new world within whose breasts blazed the unquenchable would like to know how I managed to the children of the new world within whose breasts blazed the unquenchable would like to know how I managed to the children of the new world within hired man who may read this article, would like to know how I managed to the children of the new world within home on the banks of the Potomac and led the children of the new world within home on the banks of the Potomac and led the children of the new world within home on the banks of the Potomac and low per cert interest, which remained un-low of the protein the children of the new world within ho

DISTRICT SCHOOLS.-Schools of the country districts are often inaccessible during some portions of the winter months owing to the deplorable condition hands, that the minutes and hours of a shorter day can be much better utilized shorter day can be much better utilized shelled corn as there is after the ground of the roads, which, unfortunately, retards in swing unnecessary steps, by having unnecessary steps, by having angeles so hung that they will open and with fodder on one side and left room stances. These obstacles, however, do not daunt the spirit of the average American youth, for, despite these obstacles, he progresses to an astonishing degree. The woeful lack of interest, too often manifested by grown up people in making the district school room pleasant, is a griev-ous error. Make the school room bright and inviting. Let some substantial citi-zen contribute a set of encyclopedia and, believe me, he will never regret the gift. Other contributions can be made as the demands suggest. A well equipped school is an invaluable auxiliary in the education of the young. Another important feation of the young. Another important fea-ture in conducting a successful school is in securing a competent and reliable in-structor. Pay a fair price, living wages. A good teacher is cheap at any price; an inexperienced and inefficient teacher ex-pensive at the lowest price. Richelieu's aphorism that:

"In the hands of men entirely great The pen is mightier than the sword,"

Editor RURAL WORLD: Says United is exceedingly applicable in this connectates Labor Commissioner Carroll D. In the hands of a good teacher than pen clears the battlefield of life of many

pen clears the battlefield of life of many of the objectionable and perplexing problems that are incident thereto.

The late ex-President Harrison condensed a vast amount of common sense in these few words: "One deliar voted by the people of any school district for the support of common schools is worth \$10 given out at the treasury of the United States." The remarks of our journalistic States." States. "The remarks of our journalistic friend—Dype—in recent articles appertain-ing to the subject discussed, contained numerous admirable suggestions worthy of perpetuating.

We should like to see in every district chool a well selected library. Doubtless each pupil would gladly give a book or two, which would contribute materially toward the intellectual development of the individual who, with proper diligence, perused the literature placed at his dis-

We have never taught school and do not write these reflections in the spirit of a lecture, but rather as a friendly chat with the intelligent reader. We have attended several district schools in our day and -cannot refrain from accentuating upor a theme so important to the American citizen. A good school system is an es-sential pre-requisite in training the growing generation to the high ideal of a per fect citizenship in this, the greatest re

Washington, D. C., March 19, 1901.

A HIRED MAN OF 50 YEARS AGO.

Editor RURAL WORLD: The "hired nan" seems to be the subject of market attention in late issues of the RURAL WORLD. As four successive years of my life in boyhood and early manhood were lived as a hired man on farms in ra's brightest rays, we hear nature pro-claiming in no uncertain voice that the old has passed away and behold, all

years with the sile. I will venture a few evident. In value, our agricultural out- nine years ago (1852) when I began my I experienced great difficulty in getting
I experienced great difficulty I experienced great difficulty in getting 000,000 a hundred years ago, has increased to the family of the emormous sum of \$3,000,000,000 a ployer. In those days there was no labor-

suppose I spent in the six months? Only \$10. When my time was out, my employer did not have the money to pay me the balance due. I took his note for or business stops.

Yet, "Dost thou love life, then do not squander time for that is the stuff life is made of," and the farmer must use the portion of the "stuff" that has been given him to good advantage if bountiful harvests are to be expected. We do not mean to suggest that the average farmer should get up in the morning earlier and go to bed later—we believe that, as a rule, he now makes his spring and summer working days too long—but we are in-

shirt three or four Sundays, and then it was not much soiled.

When my time was up with my first patches and get everything planted in was not much soiled. When my time was up with my first employer I hired to a widow to pick aplady, paying for my board by working venings, mornings and Saturdays.

Douglas Co., Kas. UNCLE AMOS.

(To be continued.)

NOTES FROM AN OHIO FARM.

Editor RURAL WORLD: Our paper has valuable correspondent in C. A. Bird n the issue of March 13 he writes a good paper; the part where he speaks of asher for the berry patch especially attracted my attention. I note that he does not practice the same method of seeding oats that we do. It is not necessary on his that we do. It is not necessary on any rich, loose soil, while on our limestone, clay loam we must work up the soll well or have no crop. Ashes will no doubt be of great benefit to his berry and fruit that it is "right" the rest of the time.

Brown Co., O. C. D. LYON. crops, while we get absolutely no benefit from the use of ashes on any crop. In from the use of ashes on any crop. In fact they have lessened the yield of wheat and potatoes for me more than nce. I have used hundreds of bushels of hardwood ashes from fireplace, stove and mills, and I would not again pay 10c a load and haul them 100 yards.

Hold on, here; as I turned the paper saw Mr. Editor's comment on the note by Mr. Bird, as well as on the article by Mr. Schnell on the third page. I would almost wager a peanut that Mr. Schnell is on a limestone soil, and the facts as we all present them are worthy of close attention. We spend a great deal money for fertilizers and much of it is money for fertilizers and much of it is spent blindly. Of course a good farmer ought—mind, I say "ought"—to make the nitrogen necessary to the growth of the crops of the farm, from the crops of the form. There are some accordings to this. farm. There are some exceptions to this, as in the case of the gardener and trucker, who usually keep little or no stock; but the man with 100 acres and eight or ten head of horses and cattle needs buy

no nitrogen.

Thousands of dollars are still spent every year by farmers for lime, and not one-fourth part of the lime used is one cont's benefit; with me it is valueless, as I have proved by burning two large kilns and by applying the lime from them in varying quantities, leaving check strips

We used to buy our phosphoric acid in bone only and were very particular to see the bone in it. Then we began to try boneblack, then acid rock, carefully looking at the analysis printed on the sack to see that the phosphoric acid was "solu-ble;" after a while we learned that the 'reverted' acid was as valuable as the 'soluble," and now we have it from undisputed authority that the finely ground chosphatic rock is just as valuable to the farmer as that which has been treated with sulphuric acid. The only thing we need know is the total phosphoric acid contained in the goods we buy without reference to its being "soluble," "revert ed," "available," or "insoluble."

No one combination of chemicals can suit all soils and all crops, any more than another chemical combination can cure any and all diseases; the most valuable experimentation, and the best results the farmer gets from any work he does is

farm; in the meantime, "do write" and "fear not."

sistant Secretary Brigham, for them They are seeds, garden seeds, 14 packages 6 duplicates, of "selected varieties," cab kind.

Truly the sphere of activity in the family, but as his good wife kicked, the allowed me \$2 for the laundry work, farmers' field is practically unlimited. To him the hungry world must ever look for its food supply; the naked world for its look giving me for the six months, from the lits food supply; the naked world for its left food supply; the food supply; man and are known varieties, not "select-ed," as we want to know what kind of stuff we are going to raise. Last year I A part of the peach buds are killed, but

shut. Fruit of all kinds promises well.

A part of the peach buds are killed, but more than enough are left. We will spray everything in the fruit line this year and hereafter, as we are convinced it is the number of the consciousness of a good day's work well done. Three of my boys, to my tobacco tenant and myself, raked and sowed 250 square yards of tobacco bed and 50 more lets us out. The oldest boy first barley, and he harrowed it in. Then he broke 40 rods of land for extra early protatoes. These will be planted to-morrow, if it does not rain. We get best read suits from planting very early, and of early maturing varieties. Our favorite is early Ohio, and next Rose for main crop.

Heteron does well.

Fruit of all kinds promises well.

A part of the peach buds are killed, but more than enough are left. We will spray wheat and meadows are looking badly. Wheat and meadows are looking badly. Stock of all kind is looking well. There is not much stock in the country, though there seems to be plenty of feed. Hay is 40 cents. I hought five four-year-old and will be in shape to make a good growth this summer. I notice some stock this element of the peach bush give freed and so more lets us out. The oldest boy fought the country that has been only out the country that is not much stock in the country the country that is not much stock in the country the country that is not much stock in the country the country that is not much stock in the cou

time. Our garden and truck make half ples for 40 cents a day, until school our living and—well—the hens make nearopened, which was about the first of December. The money I earned while in
her employ bought the books and clothes
sufficient for school. I boarded with this day; says he: "Plenty of time to plant 'taters; light of the moon in April is a good time," and I know that he did not raise five bushels of potatoes last year, and year before last he only had nine plowed the land in March and in spite of the fact that the last days of the month and the first days of April were ideal days to plant he waited for the April

moon to "get right." I had nearly 60 bushels of potatoes on a quarter of acre; he had 44 on a full acre. I do not suppose that it is "right" for the moon to get "full," any more than it is for a man to do the same, but as the moon is only "full" a little while each month I assume

COW PEAS.

Editor RURAL WORLD: I have bee requested to give my experience in rais-ing stock peas. I have found it best to sow them about June 10, or later. I used to plow my ground and then drill them in. One 20-acre field I drilled in with a two-horse corn planter, and then straddled every row, thus making the rows about 18 inches apart. When the peas were six or eight inches high, I ran single shovel plow between the rows to cultivate the peas. But it doesn't pay for the trouble, besides it leaves the ground rough. My best crops have been hose that I sowed broadcast, sowing about a bushel and a half to the acre on fresh plowed ground, before harrow-ing. Then I harrowed and ran a good, heavy drag over the ground. I like to ow right after the plow, or as nearly so

July last year that made a fine crop. cut them with a mowing machine when properly ripe, and follow with a sulky rake, and put them up in small and rather high shocks. You may think that they rake, and put them up in high shocks. You may think that they high shocks. You may think that they would mold when put up so green, but they will not, when put up this way. You don't lose the fodder or leaves, as the hair would readily come out. The skin you do to let them lie in the swath a you do to let them lie for two days in day. I have let them lie for two days in thoroughly cleaned of the hair, washed, scraped, stretched and tacked to a board and rubbed thoroughly with a mixture of and rubbed thoroughly with a mixture of and rubbed thoroughly with a mixture of order to get them properly cured. Now I just keep cutting and putting them up in shocks until I get my crop all cut. If I have been a week or more, and have If I have been a week or more, and have had fairly good weather, my first cutting has cured out the nicest, brightest, green pea hay you ever saw. Stack in small, high, round stacks, for a rick or a large stack will either mold or heat, so the seed will not be stack will not be sta we depend lar

We depend largely down here in "Egypt" on our pea crop, as we have lots of thin land, and our clover winter kills so easily. We can count on the peas every time, wet or dry. They are about as good for the land as clover. If you want to sow a piece of land to grass, there is no crop that leaves the land in as good a condition as a rather late crop of peas. Just sow the seed on the stubble and harrow thoroughly.

When sowing peas try to sow them in after stacking, as the peas shatter, and then a great many pods will be left in the peas shatter, and then a great many pods will be left in the poultry part of it. I come to you Friend Dype, we are all sorry that you are laid up; your letters are always help-ful. I know what paralysis is; my father was stricken with progressive paralysis on December 23, 1896, and lived nearly a wheat bran. I would rather feed the hay working on some poultry farm, thereby working on some poultry farm, thereby feed them separate.
Idlewood, Ill. J. H.

ADAIR CO. (MO.) NOTES.

Editor RURAL WORLD: We have had the most pleasant winter I believe I ever experienced; no cold weather until February, and then only down to sero by the thermometer at Pleasant Home. Some report eight degrees below, but I think they must have looked with their eyes shut. Fruit of all kinds promises well. A part of the peach buds are killed, but.

friends and never molest, but rather en-courage, them to stay with us (this doesn't apply to the English sparrow). The White and Buff Rock chickens are making their appearance with us. I expect to be able to have something fine to offer RURAL WORLD readers next fall, and also make some of the other fellows hustle for the prizes at the shows next fall and winter. Mrs. May would pull my ears if she knew I were writing this, as she is running the poultry business here. I desire to say that her advertisement in bushels. I have not much patience with the RURAL WORLD brings lots of in"moon folks." About ten years ago I rented a man an acre for potatoes; he be allowed to say it, we never have had

a dissatisfied customer or at least they have never let us know of it at any rate. March 19.—I have been putting catchers on our apple trees to-day the canker worm beetle is at work depositing her eggs in the forks of the trees, under the bark or in any crevice she may find. We commenced some weeks ago, but on account of too cold weather to work barehanded had to give it up. We find from one to six and eight of the bee-tles under the screen where put on first. The job ought to be done in the fall, however, for best results. What we fall to get this way will be given a dose of poison as soon as hatched out. They are going to ruin the orchards here if people don't destroy them. It is warm to-day and some are sowing oats.

Pleasant Home Fruit Farm.

LETTER BOX.

CUT WORMS .- Will Geo. D. Bowers tell us how to fight the cut worms? Are they the same as the army worms? We had them in some localities on the coast last MRS. M. ELLA CARPENTER.

HOW TO TAN SKINS .- Will you or some of your many readers tell me through your columns a good way to tan ides of animals with hair on and also

without, so I can use same for lacing, and greatly oblige an admiring reader of your interesting and instructive paper?

Pawnee, Okl. T. W. G. A method practiced by the writer when a boy is as follows: If the hair, say of a squirrel or the wool of a lamb skin, was to be removed the skin was spread out in a shallow vessel, flesh side down. on the other, flesh side in contact; if more, place them two and two, flesh side together.
The tanning (more properly tawing, for

tanning is only accomplished by the aid of tannic acid) can also be accomplished, after the hair has been removed, by hard rubbing with cod oil or other oil that is not a drying one like linseed. In a small way we think butter would be effective for this purpose. During the process of tawing, the skins should be well worked to make them pliable.

Perhaps some of our readers have other

WANTS TO LEARN POULTRY BUSIworking on some poultry farm, thereby being fitted to go into the business right. Can you tell me of any place where I can find such a chance? I am young and strong, and can furnish best of reference and can do anything from hard

erence and can do anything from hard work to keeping books. W. P. B. Livingston Co., Ky. We will be glad to put our correspond-ent in communication with poultry fan-ciers who may want to give him a chance to get experience in exchange for his services. Mutual advantages should come from such a combination.

The Dairy.

THE PALMYRA, MO., CREAMERY. The "Marion County Herald" says the creamery payroll for February amounts to \$314.08. The number of patrons is 52. The basis of payment for that month was 20% cents for butter fat. February was a poor month, and butter prices were down. So far this month prices have been better, and if March holds out as it has begun, Mr. Rohrer will pay something over il cents for the month. For the past three months the creamery payroll has averaged over \$500, and these three months are probably the worst

SPRING SERIES OF INSTITUTES.

Editor RURAL WORLD: For the purse of arousing interest in dairying the Brady-Meriden Creamery Co. of Kansas City announced a number of meetings in the western portion of Missouri. These meetings were addressed by several different dairymen and others, among wh were ex-Gov. W. A. Poynter of Nebraska, W. W. Marple of Kansas City, Prof. W. H. Phipps of Manhattan, Kas.; P. D. Ashburn, former Dairy Commissioner of Ohio; and Dean Waters of Columbus.

Onic; and Dean Waters or Columbus.

The remarkable evolution in dairy methods during the last quarter of a century has been unparalelled by any other department of agricultural industry. The partment of agricultural industry. The
"American system of associated dairying," which has been so phenomenally
successful in some localities, has proven a
disastrous failure in others. In seeking
a cause or causes for failure it may be a cause of causes for tander in the business said that farmers went into the business sometimes without a clear understanding of it in all details and for want of "stick-to-it-iveness." But the co-operative methods have been greatly modified, the state of the property of the state of the st implified and cheapened. Instead of the "creamery" owned by the "patrons," who furnished the milk, where the butter was made by an employe or manager divided the net profits of sales with the patrons after running expenses were paid, we have the "skimming station," at which the cream is separated (by machinery) and sold to some large factory located, it may be many miles distant. In this case the farmer runs little risk. He sells the cream at the market price and takes the skim milk back home for feeding calves or pigs. This method is gaining in favor. The Beatrice Creamery Co. of Nebraska manufactures butter om cream furnished by a number of stas, some of which are located over 100 miles away. In another state a central butter factory makes ten to twelve tons of butter per day from cream supplied by fifty skimming stations supported

Dairy meetings were held at 15 places, and one or more of the above ned persons were present.

Besides the dairy meetings a number of farmers' institutes were held in as many other localities. Increased interest is taken in these institutes, and in most of the places visited organization was perected with the view of preparing for large meetings during the next fall series.
The secretary of the Board of Agriculture, G. B. Ellis, very wisely suggests that we should not hold meetings next fall at any place unless assured of a good attendance. To insure success in every case it will be necessary to have proper organization and committees appointed We shall probably visit some other points prior to the fall series to make such arrangements as will insure success.

G. W. WATERS.

THE COW END OF DAIRYING.

It is practically certain that no matter how intelligently, carefully, and well the product of our dairy herds in milk, butter and cheese is managed, we shall fall to make the best of our opportunities in dairying if slipshod methods are practiced in the care of the cows, and in the preparation and provision of their food in order to produce the largest quantity of milk at a minimum of cost. We are fully persuaded that in the case of the great majority of dairy herds in this country the owners come very far short of realizing the profit they might, firstly, from the lack of care and judgment in the breedthe owners come very far short of realiz-ing the profit they might, firstly, from the lack of care and judgment in the breed-ing and selection of their cows, and, secondly, from mismanagement in the feeding and care of the cows.

The question of breeds and breeding is an important and interesting subjectan important and interesting subject—
one on which there is room for great
difference of opinion, and which it is not
our purpose to discuss in this article; but
the matter of testing the cowe to learn
definitely whether they are paying their
way decently or not is now so simple
that there is little excuse for going on
with our work blindly or with ingiorious
uncertainty, and if by testing we find
It has also been shown by European inthat there are inferior producers in the
vestigators that this disease can be transthat there are inferior producers in the vestigators that this disease can be transherd consuming as much food as the su-perior producers, it is clearly in order to insist on their expulsion and the sub-stitution of a more profitable machine as

Spring

feeling are due to the same causeweak, thin, impure, tired blood.

cine is Hood's Sarsaparilla.

It makes the blood rich and pure, cures scrofula and salt rheum, gives a clear, healthy complexion, good appe-tite, sweet sleep, sound health. For cleaning the blood the best madicine money can buy is

and a Hood's Sarsaparilla the business, and is, no doubt, one secret of the comparatively small returns they receive for the labor and feed expended them. We know it is easier to moralise this way and to give gratuitous advice as to getting rid of the unprofitable cows than to do it, but the present high prices for butchers' cattle would seem to make it a specially favorable time for feeding off the worst producers, and if the beef boom has that effect, it may prove a blessing in disguise to dairymen. It is one of the advantages of dairy farm-ing that the idle and incompetent con-not in the end prove a total loss.—Ex-

LAGRANGE, MO., CREAMERY. Editor Palmyra, Mo., "Herald:" Will

months are probably the worst in the control of the deavor to furnish you with brief infortirely too much. Stock is owned by pat-rons and citizens of LaGrange. Think it best to have all stock owned by patrons as they would take more interest in making it a success. Our creamery has been a success from the start. Territory small from which we get our milk supply, river on east and large wheat and corn farms outh. Milk all furnished by bluff or upland farmers. With these surrounding we have made money from the start, paid stockholders a good interest, 6 and last two years 7 per cent dividend. Stock worth par. So you can see our success is not due to large milk supply, neither is it due to Board of Directors, but solely to Mr. Lewis, who is butter maker, secre tary and treasurer. He understands his business and gives it close attention. Hence I think the success of your cream-ery will depend on your securing the right man for the place. Only those creameries that make first-class goods can succeed. We pay Mr. Lewis, in fact have done so from day we started, \$75 per month; one assistant, only help he has, \$26 per month Milk is bought by test of butter fat. Have always governed price to patrons by what product brings on the market. Af-ter deducting all expenses—i. e., labor, ice, coal, repairs, etc., etc.-also net profit for the month, the remainder is paid to pat-rons. Hence we have never made a spe-cific price to patrons, but are governed entirely by market. We ship cream whole milk and buttermilk and so ter, but as we make most for patrons by selling cream and whole milk, only make butter from milk not in condition to be used otherwise. Milk and cream for ship

ping require extra care.

The creamery has been of great benefit to farmers. We never hear any complaint from patrons. All are making money, hence are well satisfied. You have much better location than we, as good shipping favors. Can see no reason why you should not succeed if you secur

the right man to operate your plant.
Would like to see "Poor old Missouri"
come to the front on dairying. There is
no reason why she should not. We have splendid grass and grain land and mu shorter winter than some of the northern states that are making so much money dairying. Have written hurriedly, but tried to touch all points requested in letter. Will be glad to furnish you fur-ther information if able to do so. Hope you will not hesitate to write me if you desire more information

The following is amount of milk received and amount paid patrons by LaGrange

creamery for three months:	arting 0
Pounds.	Cost.
October146,686	\$1,200
November	
December123,200	1,150
A very nice sum to be distr	
among the farmers and a great h our town in a business way. Truly LaGrange, Mo. A. BOZAR	WOULES.

CALF CHOLERA. Calf cholera has spread very rapidly in this state, says Dr. A. T. Peters, D. V. S., Nebraska Experiment Station, and Nebraska State Veterinarian, and has caused very serious loss. In localities where it has not prevailed it is regarded as a new disease; yet it is one that come with the dairy industry and is well know to the dairymen in the districts where dairying predominates. Investigations relative to this disease have been carried on to a great extent at this station. No

germ which enters the navel; and whe

the navel is kept clean and not allowed

infected, this disease can be

very easily cured.

Calf cholera chiefly attacks animals

soon as practicable.

The apparent indifference of so large a proportion of dairy farmers to the quality of their cows is one of the surprises of their cows is one of the surprises of their cows daily of th pears restless, and has ineffectual straining to pass dung. They bellow and seem to be in distress. The excrements, which first seem to be somewhat curdled, later become of a yellowish color; then watery, and finally of a water color. After these continue they may be streaked with blood and mucuous seem to be somewhat curdled, later and finally of a water color. After these continue they may be streaked with blood and mucuous seem to be somewhat curdled, later and finally of a water color. After these continue they may be streaked with blood and mucuous seem to be somewhat curdled, later and finally of a water color. After these continue they may be streaked with blood and mucuous seem to be somewhat curdled, later and finally of a water color. After these continue they may be streaked with blood and seem to be somewhat curdled, later and seem to be seem to be somewhat curdled, later and seem to be somewhat curdled, later and seem to be seem to be somewhat curdled, later and seem to be somewhat curdled, later and seem to be seem to be somewhat curdled, la

America's Greatest Spring Mediand in a separation of the seen some where medical aid has stantial barns, but to the seen some where medical aid has stantial b navel by some germ, therefore the pre-vention of this disease is the only sure care will not make a cow that only has vention of this disease is the only sure method by which we can receive any aid. It has been demonstrated that the treat-milk a day, a profitable cow.

(2) The urine contains one-half of the mitrogen, almost no phosphoric acid and three-fourths of the potash of the food. method by which we can receive any aid. It has been demonstrated that the treatment, after the animals show symptoms of the same, was of little avail, and that the larger per cent of them died on account of the rapidity with which they begin to collapse. For this reason the best results obtained were in a thorough disinfection of stables, removing all little that was possibly contaminated by the excrements of an animal so affected,

FAKE TESTS AND TESTIMONIALS ABOUT CREAM SEPARATORS

There are always new people to be gulled with an old fake. Hence a word of caution is pertinent regarding the reputed separator "test" and "testimonial" advertisements now being published in some of the papers and put out in circulars.

As regularly as the malarial and sarsaparilla season comes around the would-be competitors of the De Laval machines like to flatter themselves by seeming to stand up alongside the De Laval machines and publish reports of their imaginary nearness in efficiency, -According to means and measurements of their own creation and without much regard for truth

Many of these so called "tests" are simply manufactured out of the whole cloth,-it being impossible to locate the places where made or the persons by whom made. Others of them are made by agents or employees or by intending buyers who are offered a big discount and an agency provided they will "try" a De Laval machine in apparent test, the conditions of which "test" are to be fixed by the concern in question and the "results" then certified to by the purchaser. Sometimes innocent parties are called in as "judges," to certify to skimmilk "tests," when they know no more of the manipulative use of a Babcock Tester than they do of a flying machine. Occasionally tests may be honest in a way but so conducted as to be altogether impractical and misleading in results shown.

All this applies equally to testimonials, though some of these are given in good faith—just as is the case with "dilution" separators and every other fake and nostrum ever perpetrated.

There isn't a man living sufficiently familiar with cream separators to pass competent judgment upon them who does not know that the patent protected "Alpha" disc system employed in the De Laval machines renders them unapproachable by anything else vet devised,—a fact to which thousands upon A "20th Century" De Laval Cata- thousands of De Laval users may bear witness logue may be had for the asking. with their experience.

The De Laval Separator Co.,

GENERAL OFFICES: MONTREAL. 74 CORTLANDT STREET. CHICAGO. 103 & 105 Mission St., SAN FRANCISCO. NEW YORK.

and washing the vagina and tail, or in placed opposite each other so that there and washing the vagina and tail, or in other words the entire hind-end extremities, with a five per cent solution of zenoleum once a day for ten days prior to calving. Upon the arrival of the calf, the navel is immediately disinfected with a similar solution, and this must be continued until it is thoroughly healed. In case animals show symptoms of the distance of the calf, the day, for roughness, hay and straw are used and a balanced ration, consisting of the cows are curried and brushed every day; no one is allowed in the barn except the cows are fed four and five times a day. For roughness, hay and straw are used and a balanced ration, consisting of the cows are curried and brushed every day; no one is allowed in the barn except. ase animals show symptoms of the disease, the navel must be thoroughly cleaned and a lukewarm water solution containing three per cent of this fluid is jected into the anus at least three times a day. The animals should be kept by themselves, so as to avoid all danger of infection, and should be given half an unce of alcohol in either a linseed tea or tea, every three hours, to stimu-ie heart. To apply hot applicalate the heart. To apply hot applications around the chest to avoid congre tion is also advisable. This is done by taking a piece of cloth saturating it with hot water and winding it around the chest walls, and covering this with a voolen blanket. This will stimulate the animal wonderfully. If these methods are carried out the greater number of the animals can be saved.

DAIRYING IN DENMARK The following is from a paper by A. M.

Larsen of Kansas City, Mo., read at the late meeting of the Kansas Dairymen's In Denmark the farmer has been breeding his cows for the dairy for the twenty years, and they have bred to a high standard. They have a number of breeders' associations. These associations buy some of the best pedigreed bulls, paying from \$1,000 to \$2,000 each for such an

become of a yellowish color; then watery, and finally of a water color. After these continue they may be streaked with blood and mucuous membranes. We also see twelve feet long and not allowed more Cleaning

You are made aware of the necessity for cleaning your blood in the spring by humors, eruptions and other outward signs of impurity.

Or that dull headache, billous, nanseous, nervous condition and that tired the service of the service of the service of the service of the later stages, the excrements have a strong odor. The animals become very weak and grow rapidly weaker, and lie down. This may be accompanied with convuisions. The eyeballs become sunker, the hair rough, and the general indications of death appear. Death usually time, preferring to keep the cow in the barn the whole day without feed rather towns are well marked, though some cases toms are well marked, though some cases
may run from two to three days, and I
have seen some where medical aid has
stantial barns, built of brick or stone,

The milk of each cow is weighed at milking time, and a correct record is

milking time, and a correct record is kept of every cow.

Central associations have been organized for the object of having an expert visit each dairy two or three times each month to test the milk from the different cows. The Babcock test is not generally known or used in Denmark, and they use nown or used in Denmark, and they use the Gerber or DeLaval tester, which are

as the Babcock test.

Denmark imported from the United States in 1899 11,000,000 pounds of feed, consisting of small grain, corn, oil meal and cottonseed meal, besides a great amount from other countries. This system has increased the fertility of the soil and has entirely revolutionized the agricul-

about 100,000,000 pounds of butter annually. For it the Danish farmers receive about \$2,500,000 a month.

The co-operative system in Denmark has benefited the farmers in more than one way. They have been the means of educating the farmer in addition to aug menting his income. The common interest which they had in the creamery consultations, resulting in better methods and the propagation of new ideas and

Besides the breeders' association, they have a feeders' association, which consists of local organizations organizing into a central association that buys feed direct from foreign countries and the farmer does not have to pay half a dozen dealers a profit for hauling it. The Danish farmers have co-on

packing houses that have been in operation now for ten years, with the great-est success, and they have organized their own banks, and have organized and built their own railroads.

The Danish dairy cow has lifted many a mortgage from the farm; she has increased the farmity of the farming of the farm

ed the fertility of the soil and has aided in accomplishing a great many things that would otherwise not have

MANURIAL VALUE OF EXCRETA. (1) The feces from milch cows contain

about one-third of the nitrogen, three-fourths of the phosphoric acid and one-sixth of the potash of the food.

(2) The urine contains one-half of the

see who write to us about this tim of the year complaining that their cattle are lousy are doubtless unaware of the fact that there are two kinds of lice which infest cattle. They are divided into two separate families, vis., sucking lice and biting lice. Of the first named there are two varieties, vis., short nosed louse and long nosed louse. Of these two the thort nosed louse is the larger and most difficult to destroy. It is to be found mainly about the neck and shoulders, which parts are often denuded of hair by the rubbing induced by the itchiness caused by the little pest. The long nosed louse is, however, the most familiar to cattle breeders. The body is about an eighth of an inch long and about a third of that in width. The head is long and slender without visible eyes. The one species of biting louse is very common upon cattle and is easily recognized and differentiated from the sucking louse, as it is red, while the other is blue. It is often called "the little red louse." but although it is more common than the suck-ing louse does not cause so much real damage as its blue relative. The biting ouse has a pair of cutting and biting jaws and attacks the animal along the spine, hips, rump and sometimes the head and neck. Its body does not fill up with blood as does that of the sucking louse, but it leads to a great deal of discomfort where numerous. One notices the presence of lice about this time of the year and to-wards spring. The cattle rub themselves on posts and fences and often do so in such a vigorous manner as to scratch the skin, causing it to bleed and become bare of hair. Emaclation is then likely to follow, and if the cattle be not relieved the owner is a considerable loser from his ceding operations.

When any of the above symptoms are observed the cattle should be examined for lice and it is best done after they have stood in the sun for a time, as the louse omes toward the surface when warm. If comes toward the surface when warm. If it is found, the building occupied by the cattle should be vacated, then thoroughly cleansed and whitewashed, adding a quar-ter of a pound of chloride of lime to each pailful of lime wash. The cattle should not be returned to the building before they have been vigorously treated for lice with one of the usual remedies. The Bueau of Animal Industry advises the use of a decoction of fish berries (Coccolus Indicus). Take half a pound of the berries for each animal, pound fine, then add two quarts of vinegar and set on the stove to simmer for an hour. Apply this thoroughly by rubbing it into the hair of the affected parts. This will not injure the skin or sicken the animals and is said to remain long enough to kill all the young lice as they hatch out of the "nits."—

MISSOURI DAIRYMAN'S SUCCESS

A MISSOURI DAIRYMAN'S SUCCESS.

It seems to be the vogue to report progress when a dairy farmer believes he has done particularly well, and I take pleasure in stating, briefly, what I have done in this line. Ill health drove me out of an office two and one-half years ago, and with two cows, an old ribby mag, and an open wagon, I entered the ranks of the profession of dairying. I have always sold milk in bottles in the city, at a price (8 cents per quart) that seems high, but my expenses have been much higher, living within one-half mile on city of 600,000, than if I were seen much higher, living within one-half mile of a city of 600,000, than if I were secreted an average of 11 young the year. The average of 12 young the year of the whole year thoroughweds. I sold \$2,100 worth of mile and cream during the year, and sold bulk calves to the amount of \$30. I have kept all my helfer calves so far, good, bad and indifferent. I now have 19 head of milch cows, seven helfers and a blooded Jersey bull. Last season I raised corn, oats and hay, which is supplemented with wheat bran, cotton seed meal and linseed meal, purchased in the city.

The average daily ration costs about 14 cents, during the six months of full feeding, and during the pasture months about half this amount. Hard work, keeping everlastingly at it, good management, keeping expenses down to a minimum and getting highest market price for the product, has enabled me to make a comparative success of the dairy business—and then I have my health.—H. A. Berreman in Hoard's Dairyman.

St. Louis County, Mo.

IN CALDWELL COUNTY there are IN CALDWELL COUNTY there are no neast shan a dozen cheese factories and a majority of its farmers are engaged in dairying. D. R. Kemble, who lives at Kidder in that county, recently told us that the banks in Hamilton, the largest town in the county, were complaining that they could not lend their money. The bankers said that whenever the farmers wanted to purchase new machinery or more land they simply drew a check on their balance at the bank. They claimed that very few farmers ever applied for loans.—Marion Co., Mo., Herald.



Reg. JERSEY CATTLE, bred to make finest quality butter prid's Fair stock. Two extra young A Golden Lad herd bull. L. E. SHATTUCK, Stanberry, Mo.

WANTED—Good man for foreman on Dairy
Farm. Keyes Farm and Dairy Co.
8685 Olive Street, St. Louis, Mo.

Nittsburgh. BOKSTEIN ATLANTE BRADLEY

BEYMER-BAUMAN

DAVIS-CHAMBERS

Buffalo.

FARMESTOCE cess" White Lead mixed with Pure Linseed Oil, and thoroughly brushed out, using plenty of elbow grease to rub the paint in, JEWETT ULSTER. and allowing ample time for it to dry be-WINDSWIT SOUTHER tween coats. SHIPMAN COLLIEB MINIOURI RED SEAL JOHN T. LEWIS & BROS CO MORLEY Cleveland. DALEM CORMELL.

The brands named in the margin are genuine. Any shade or color required may be easily obtained by using the National Lead Company's Pure White Lead Tinting Pamphlet giving full information and showing asmples of shades, etc., etc., furnished free upon application.

HE old-fashioned paint that never

chalked, cracked nor peeled was

made from Pure "old Dutch pro-

National Lead Co., 100 William Street, New York.



POWER

ogue free.

For pumping water, grinding feed, running separators, churning and a hundred other uses, is needed by every farmer. This RIG does the work, the best Price and description and our boiler and engine cata-

CREAMERY PACKAGE MFG. CO., e15 NORTH SIXTH ST., ST. LOUIS, MO. Dairy Supplies, Boilers and Engines, Feed Cookers, Etc.

The BUTTER SCORING the HIGHEST 98 POINTS

At the National Creamery Buttermakers' Convention, St. Paul, Minn., Feb. 18 to 23, 1901

Was the Product of the U.S. Separator

This butter was made by Edw. H. Webster, Ames, Ia., and scored one point higher than the butter entered by Ir. Quenvold, which received a Gold Medal.

Mr. Webster's butter was entered for scoring only, therefore could not compete for the prizes, which explains why the Medal was given to the butter scoring second highest and not to the butter that was really the best.

Our "would-be competitor" claims to have had 35 times as many entries at the Convention as the United States, and for all the latter had so few chances, in comparison, of winning yet the Judges reported the U. S. product the Best out of 829 packages, another proof of the

SUPERIORITY of the IMPROVED U. S. SEPARATOR We also call attention to the GOLD MEDAL IN THE GATHERED CREAM CLASS which was awarded W. C. Noble, So. Waterford, fle., whose butter was the Product of Improved U. S. Separators and Cooley Creamers.

Remember we are Pioneers in the Cream Gathering System and Concept line.

When you see our "would-be competitor" claiming every-thing at the Convention, just bear the above facts in mind, also

nat THE BUTTER SCORING THE LOWEST, 75½ POINTS, WAS THE PRODUCT OF THE DE LAVAL SEPARATOR. Write for Circulars telling of many other victories of the U. S. VERMONT FARM MACHINE CO. . BELLOWS FALLS, VT.

OUR ADVANCE AGENT \$10.50



"BURLINGTON-NORTHERN PA-No. 41. CIFIC EXPRESS" to Kansas City, St. Joseph, Portland, Puget Sound.

DAILY.

"NEBRASKA - COLORADO EX-Colorado, Utah, Pacific Coast. Also for St. Paul and Minneapolis.

Northwest, via Billings, Montana.

FOR KANSAS CITY, ST. JOSEPH Denver, Omaha, Nebraska, Council Bluffs, Colorado, Pacific Coast.

9.00 P. M. DAILY.

City Ticket Office, Southwest Corner Broadway and Olive Street. HOWARD ELLIOTT, J. G. DELAPLAINE, L. W. WAKELEY, General Manager. City Passenger Agent. Gen'l Passenger Agt,

Can't Give Away

You pay for what you get in this world. You understand that. But as a business proposition we want you to try our great medicine for Indigestion. Constipation, Biliousness, Sick Headache, Insomnia, "the Blues," and like complaints—

Laxative **Tablets**

We know you won't buy it, until you know something about it. The best way to get you to know how good it is, is to let you try it. That's what we do. Send Stamp for "Health" booklet, and we will send you a free sample package, that you may try it yourself. We know you will always keep it in the house, if you once try it. What fairer offer could we make?

At all Druggists-10 and 25 cents.

Handsome FREE!

If, instead of sending for a sample, you send us 25c we will send you "Health" booklet, a 25c box and a handsome stick Pin

If, instead of sending for a sample, you send us 25c we will send you "Health" booklet, a 25c box and a handsome gold stick-pin, set with emerald, ruby or pearl, warranted to be worth double the money. Only one pin to one person. If unsatisfactory, money returned. Bend now while the offer is good.

MODERN REMEDY COMPANY, KEWANEE, ILLINOIS.



Horticulture.

HORTICULTURAL TALKS.

MAKE HASTE SLOWLY .- Don't let these pleasant, warm days tempt you to uncover tender plants or trees too soon, as there may still be some cutting frosts. Some time ago I was tempted to uncover my fig trees and my pet rose, Pearl of the Garden, but I am glad I did not.

If when sowing lettuce seed outdoor will cover the bed with brush, it will basten its growth, and at the same time keep the rabbits from eating the young plants. Have not many of you noticed how far advanced is a patch of grass where brush has lain on it? It keeps the ind off and seems to retain the heat

of the sun's rays.

Spring is coming; the frogs are croaking; the blue birds and the red-winged blackbird are here, and the song of the gentle dove is heard in the grove. Who

them to life at the proper time.

The ruling spirit is strong in death, is an old saying, and it is true also with the living. Some years ago I gave up the growing of trees, and now have about day of March for 10 : 6,000 rootgrafts of apples! pears and plums to set out. The planting of trees is a habit, once acquired, that is hard to THE YELLOW JEF

CHESTNUT TREES.-I have some 500 two-year-old chestnut trees that are ready to set out, which when grown one year are to be grafted. I have proposed and we find it a strictly Yellow Jersey, to the party who has land adjoining, that if he will clear the land for 20 feet on each side of the line (as there is small timber part of the way) I will plant the stringy, but we got fine plump tubers and

These nut-bearing trees have been neglected too long. Some 20 years ago a hickory nut tree was cut down near here, that I would not have sacrificed for \$100 if it had been on my own land. I did not expect to meet with anything equal to it; but fortunately it cast some of its nuts on the ground not far off, and now there is a beautiful tree bearing a simnut. I have sent nuts from this tree to the extreme southwest of the United States. It is the largest nut I ever saw, is not thick-shelled, and has my son, and there is no fear of its being

QUESTIONS AND ANSWERS .- Mr. B-, the Yellow transparent apple is a No. 1 apple in all respects, and for a summer rket, I think would be a profitable one

D. Kangel, the apple you sent me to name is the Red Romanite, an old favorite, and a long keeper. I have about 25

S. Eihlerman, the man who told you that it is proper to leave the old canes of last year in your blackberry and rasp sustain the bearing canes this season is from the depredations of stock it seems applied any time up to the biossoming of nonsense. The fruiting canes, if property to me to be one of the most desirable the trees. Trees badly infested might up the double-barreled shotgun with out all the dead wood. Clean it all out a ready market wherever known. The out all the dead wood. Clean it all out a ready market wherever known. The out it the trees have become weakened it use. When the first swarm came out, all and burn it. Leave to each stool only theory that the barberry harbors the is best to destroy them at at once. While it use. When the first swarm came out, all hands went to work to settle the bees. three to five canes to bear. If there is any anthracnose on your canes, dose one cause of its neglect as a decorative them with strong Bordeaux mixture bestrub. The hedge I have spoken of stood unwise to risk it. The spraying can be up water among the bees, while the restricted in the strong bordeaux mixture bestrub. The hedge I have spoken of stood unwise to risk it. The spraying can be up water among the bees, while the restricted in the strong bordeaux mixture bestrub. The hedge I have spoken of stood unwise to risk it. The spraying can be

March 14.—It snowed from 8 a. m. to 9 a. m., but the snow melted as it fell.
HORTICULTURE AND ANGORAS.— Don't ask any questions about these goats, as I have given mine over to my sons. Samuel E. Miller will answer what you ask me. Both these subjects are proper, but don't work well together. The roats will clean up all the flowering hrubbery and bark all the fruit tre I think they are the coming animal for the farmer and stock raiser.

They are handsome animals, tame as cats, and will be profitable. The kids are amusing pets for children. I would like to have them around even were there no money in them. No one need ask whether we have any for sale, as the boys would rather buy than sell. If you get them, don't let them get among the fruit trees or ornamental evergreens, as they will eat cedar leaves just as freely as a sheep will eat grass. In fact, they will eat anything green. These Angoras have not that disagreeable odor that the common goats have. Blufton, Mo. SAMUEL MILLER.

SOUTHERN OHIO FRUIT NOTES.

Editor RURAL WORLD: One of the est fruit growing sections in America is this Sixth Congressional District of Ohio, yet I deem it safe to say that it does not, on an average, produce as much fruit as it consumes. Reason, old methods will not succeed when new enemies have to be fought, and our people are slow to adopt new methods. On our old orchard, now a corn field, we have grown Albe-marie pippins as fine as any ever sent to the Queen of England's cellars, and gentie dove is heard in the grove. Who would not live in the country amid fruit rees, flowers and the songs of the birds? The latter have full play here, except the English sparrow. He must go. If there is anything on earth that will cheer the heart of man, it is the opening of spring, when Mother Earth begins to show that she has kept her trees and plants dormant for a time, only to awaken them to life at the troper time. 1871 we sold from two acres of peach or-chards over \$1,200 worth of fruit at prices ranging from \$1.50 to \$3 per bushel. I do not suppose that one could find in my county to-day, or on any other 9th day of March for 10 years, 10 bushels of merchantable apples. C. D. LYON.

THE YELLOW JERSEY BUNCH OR

VINELESS SWEET POTATO. imber part of the line, a mile for our mutual benefit with chestnut trees. I will also agree to care for
the trees while I live and am able to do
so, if the other party will promise to
keep the cattle from injuring them. It
a not likely that I will derive any benetand likely that I will likely that I will likely last cultivations,
become troublesome and have to be laid
aside. We look for a vineless Red Jersey
before long, if it is not already in the
land. The original bunch variety, called
Bunch Yam, has not been a success
here, as it does not produce well, making
here, as it does not produce well, making only leaves and roots, especially in rich soil. We have discarded it, although its eating qualities are excellent. H. SCHNELL Howard Co., Mo.

THE BARBERRY AS A HEDGING PLANT.

hood's memory there is none which gave more pleasure than that of the barberry hedge which grew near the old schoolhouse; that old hedge which furnished us shade during the hot noontime play hour. The bushes with their deep green foliage, excellent meat. This tree belongs to racemes of yellow flowers and hidder thorns that prevented their destruction, and later, the bright scarlet berries hang-ing until late in winter, perhaps the glasses of barberry jelly that graced our mother's pantry shelves and gave a relish to the bread and butter eaten at school intensify that memory.

This was over thirty years ago, but the

ries as then. is proper to leave the old canes for hedging plants for our suburban homes why would it not be well to plant should not begin before March 20, or only, doesn't know anything about this date. Apply at this time a 20 in hiving them.

I said, "Well, we will be ready for the

In order that our readers may understand why one remedy is used for one insect and not for another, it will be necessary to make some brief references

To facilitate should be som to the structure and habits of certain types. For example, the great mass of injury to plants by insects falls under two heads, first, where the plant itself has been eaten, and second, where the

BITING INSECTS.—Insects causing injury of the first class are called biting or chewing insects, familiar examples of are numerous, it should at once be which are the beetles, grasshoppers and caterpillars, such as the cabbage worm, army worm, etc. They have well developed jaws fitted for cutting and chewing the plant. Such insects can be destroyed by use of direct poisons, such as the arsenicals. Where applied to the leaves or other parts of the plant it is

eaten by the insect, causing its death. SUCKING INSECTS.—On the other hand, the second type have long lance-like beaks fitted for sucking. This class includes the scale insects, plant lice squash bug, harlequin or terrapin bug, etc. They obtain their food supply by inserting their beaks into the tissues of the plant, sucking the juices from within The external application of arsenical poisons to plants would have little if any effect upon this group of insects, as the poisons do not enter into the cells of the plants. It is necessary, therefore, to em-ploy some other substances for their de-struction. To this end materials are used which will act externally on the bodies of the insects, either as a caustic bodies of the insects, either as a caustic or to smother or stifle them by closing their breathing organs. I might say in this place that insects do not breathe through their mouths as do higher animals, but through small openings on either side of the body called spiracles. By spraying anything of a caustic or oily nature over the body of an insect these

ous gases are employed to suffocate in as will be described later on. In-

The foregoing remarks apply especially to insects which feed upon the exterior of plants or pass the greater portion of their lives in an exposed condition where they can be readily reached by one of the nethods mentioned. Certain other incts, of both classes, biting and sucking are subterranean in their habits, that is, they feed and live upon the roots of plants below the surface of the ground Among these the white grub, and root lice are common examples. Still other insects live in stored grain, seeds and the manufactured products of the mill, and even the mill itself. Here again the arsenics and irritants cannot be used and we must resort to various fumes and gases.

Bulletin No. 65, Md. Expt. Station

PEACH GROWING.

Mr. J. H. Hale's address before the late meeting of the Western Horticultural So-ciety, says the "Rural New Yorker," was, as usual, full of good points. He says we do not any more believe in peach "belts," having found that peaches can be grown almost anywhere in the United States, a few extreme northern sections excepted. uccess depends mostly on the man or oman, and on closest attention to the usiness. The land should be on an elevation, the ideal soil being a light, medium sandy loam. Plow one or two crops of clover into the soil, and prepare it as you would for any garden crop. Then plant and give high cultivation. For a over crop he recommends a mixture of cow peas and clover. The frost kills the cow peas, and gives the clover room and strength. He gives the trees free rations of potash and phosphoric acid, and just as little nitrogen as will pro-duce good healthy foliage. He prefers large trees for planting, and trims them rather close, but not as close as Mr. Stringfellow does. The new growth is cut back severely every season, the first sea-son perhaps not as much as afterwards. In strong-growing trees, his practice is to cut the strongest shoots out entirely and to leave the weaker ones for fruit-This point he considers the most able in his address. Thinning the fruit to about six inches apart is most important. Borers are to be dug out in October, and again in May. Banking the trees up with soil in spring will keep the borer out at that time. The earth bank-ing is removed in July. As to the size of package, the largest one that he can get into the private door unbroken is the one that he wants. Girls are employed to do the sorting and packing, as most fitted to pack honestly. Mr. Hale is nothing if not original. He believes that "music has charms," and claims that by hiring s band to play for his crew in the after noons, he has been able to get 30 per cent more work out of them. Mr. Hale was fairly pelted with questions, and replied with his usual quickness and wit. Thus he told how he frequently cuts the whole top out of an old tree to make a new head. Cultivation is done mostly by a modern extension harrow. He name Carman as one of the most promising peaches in America, but not rot-proof, as claimed. It is of delicious quality, and the tree a fine grower. Elberta is good at the South, but of poor quality. Triumph, if well grown, well thinned and oughly ripe, is almost a freestone, and a good early peach for home use but not for market, as it is quite subject to rot.

KEROSENE FOR SAN JOSE SCALE

A satisfactory course of treatment can be outlined. It is unsafe to spray peach dirt and water among the bees as they barberry hedge still stands, furnishing trees with kerosene when they are pershade for other children now, putting out leaves and flowers, and maturing its berascend in the spring there is little or no into a hive. Another article stated that ascend in the spring there is little or no danger of serious injury from a 20 per At a time when there is so much call cent mechanical mixture of kerosene and bees would cause the bees to settle down them with strong Bordeaux mixture before the leaves come out.

HEADING BACK PEACH TREES.—I
have done a part of this work, but still
have considerable of it to do yet. One
grower says let it alone until the trees
are in bloom, then one can see better
how to trim. I do the work whenever

INSECT ENEMIES.

The heade I have spoken of stood upon one of the best wheat growing continued with safety on strong healthy trees, after the fruit has set. As above the thoroughly moistened, but care should be thoroughly moistened, but care should be taken that the mixture does not run down about the crown of the trees in any considerable quantities. upon one of the best wheat growing continued with safety on strong healthy made all the racket they could with pany be thoroughly moistened, but care should be taken that the mixture does not run for parts unknown. So the next thing to down about the crown of the trees in any considerable quantities.

That settled it at once. The bees just

juices have been sucked out leaving the young can be seen crawling if they ex-

ist. The owner should learn to detect them, which is not a difficult matter, and whenever he finds a tree on which they sprayed with a 10 per cent mixture. This weaker strength will destroy the young insects. By following up the matter in this way I am fully convinced that the insect can be controlled.

H. P. GOULD,

Acting Entomologist, Maryland.

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PEACHES FOR MISSOURI.-N. F. Murray, president of the Missouri Horti-cultural Society, suggests for planting in Missouri either the Champion or the Crosby peach, both of which are considered ery hard varieties. The Crosby p and is the only peach that has ever been grown there with any success. It is known to have fruited for eleven consecutive years in the state of New York. The Champion peach is probably still more reliable. In Illinois, where this peach was first grown, the Champion holds the record of having yielded two full crops when every other variety failed; on each of occasions the thermometer registered 18 degrees below zero. Besides their hardiness, both peaches are said to be unsurpassed for their firm meat and the fine, juicy, nectar flavor that characterizes their taste. The Elberta is also a

good peach, but not quite so hardy. WAR ON INSECTS.—"I apprehend this ear," said Mr. Murray, "our usual fight with insects. The principal enemies are the codling moth for the apple trees and ecommend that all trees be carefully sprayed with Paris green mixed with water and lime. The proportion of parts can be gotten by addressing Doctor J. M. tedman of the Experiment Station of the University at Columbia. A very prac ticable way for small fruit growers to prevent the appearance of insects is to let the poultry pick in the orchard. About forty chickens to one acre of ground is found to be a very satisfactory number

The Apiary.

ROSEDALE FARM BEE ARTICLE NO. 1.

Editor RURAL WORLD: When read ng over the different bee articles in th papers, I am able to understand why here are so few farmers that are beseepers, as the different articles are com-plicated in the advice they give to the public. When we first moved to the coun try, I bought two hives of bees, but knew little about the bee business; se very little about the bee business; so read everything I could find on bees. The first thing that attracted my atten

tion was how to get a swarm of bees to settle after leaving the hive. One article advised getting all the old tin pans, bells and anything that would make a big noise, and then make all the racket we could, and the swarm of bees would so settle where we could hive them. Anothe writer advised the throwing up of san flew out in a swarm, and that they would shooting shot from a gun among the

buckets and bells. The bees, meanwhile made no effort to find a place to settle considerable quantities.

Crude petroleum having a test of not less than 43 degrees may be used while ed, so started for the woods. We folthe trees are dormant instead of 20 per cent kerosene.

That settled it at once. The not wantless than 43 degrees may be used while ed, so started for the woods. We folthe trees are dormant instead of 20 per cent kerosene. cent kerosene.

To facilitate the operation, the trees should be somewhat severely headed in before the spraying is begun. This is emphatically true if the trees are seriously infested. Subsequent treatment should not be neglected. About June 15 any live the swarm settle where it will, only before the spans.

before the sp experiences. ROSA AUTUMN. Fayette Co., Ill.

FEEDING BEES IN SPRING.

It is a good rule to feed all colonie in spring. We need not feed very heavy unless the colony is very low in stores, and in this case we should feed neavily until they have a good re store in the combs, says A. H. Duff in "Farmers' Tribune." Feeding may be commenced as early as possible, and as soon as the weather is such that the bees can fly a very few days. A colony fed in spring is worth on a general average about as much as two unfed colonies. By feeding we can have colonies of about ouble strength, which means double the mount of surplus honey during the

oney harvest.

Bees do not gather much honey, as sees do not gather much noney, as a general thing, from the time spring opens, until the beginning of the honey season, and during this time they must rear their entire force of bees, or nearly so, that they need to gather in the harvest. So it can be seen the necessity for helping them during this time. They will very readily comply with our wishes if we feed them, by beginning to rear more brood promptly after being fed, and just as long as we keep up feeding, they will continue to rear brood rapidly, and will stop promptly when we do. Occasionally bees gather some honey in early spring, but it is not by any means regular, so that they range the amount

of stores they get to a great extent.

A colony that has a good quantity of sealed stores in the hive as a reserve, does not suffer so much in this respect, but even then they will largely increase their stock of bees if fed. This is the reason it pays to feed all colonies, irre-spective of the amount of honey they may have. We should be particular about how and when we feed bees. They should not be fed during the day time, but al-ways at night. This should be done as late in the evening as we can see to do the work, so they perform the work of storing it in the combs during the night. This is done to prevent robbing, and for spring feeding they should be fed a little about every evening.

BEE NOTES FROM OHIO.

Editor RURAL WORLD: These are in bad shape everywhere I have been. Of my own three stands, one was queenless and left the hive in October; the other two are all right. There was little honey made last season, and most of that was of poor quality. Another year like the one past and bee keeping will be but a memory in Southern Ohio. This is a great pity, as the fruit crop depends in a great sure upon the fertilization som by the bees. C. D. C. D. LYON.

1901 SEED CATALOGUE FREE. JAMES VICK'S SONS, Rochester, N. Y

BEES AND FRUIT BLOOMS.

At the Oregon experiment station the enters forced a number of peach trees into bloom under glass last November, and introduced a colony of bees into the house, first protecting one tree so that

the bees could not get to it. From that tree all the fruit dropped when the stones began to form. From when the stones began to form. From the others not a fruit dropped, and the fruit was so abundant that it was necessary to thin it out severely.

This shows very clearly how much every

orchardist is indebted to the bee-keeps for the success of his fruit crop, as with out the bees there would not be insects enough to pollenize the blossoms, says an exchange. It should suggest to them, also, the wisdom of having a few colonies in their orchards.



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Live Stock.

ril 18.—Boone Co. Shorthorn Breeders' seoclation. Columbia, Mo. ril 28. 28.—N. H. Gentry and June K. ling. Shorthorn cattle. Kansas City, Mo.

april 22 and 22.—Two days combination sale; 106 high-class Shorthorns, from herds of June R. King, N. H. Gentry. Gentry Bros. and W. F. Harned. SHORTHORNS.

March 23.—W. E. Rigg, Mt. Sterling, Ill. April 12.—C. C. Bigier & Son, Hartwick, Lows.

April II.—C. C. Bigier & Son, Hartwick, lows.

April is.—Boone County Shorthorn Breeders' Association, at Columbia, Mo.

May 1-2.—M. E. Jones & Co., and S. E.

Prather & Hones & Co., and S. E.

Prather & Hones & Co., and S. E.

Hay II and 22.—C. A. Jamison, Peoria,
III.; B. H. Godman, Wabash, Ind.; and
others, at Chicago, III.

March 14.—H. M. Gittings, Disco, III.

March 19.—Z.—Gardner, Judy, Mattinson
and Seeley, Kansas City, Mo.

April 28-20.—Haley Bros., Harris, Mo., and
others, at Kansas City, Mo.

AT THE WEST INDIAN EXPOSITION.

An Interstate and West Indian Exposition will be held at Charleston, S. C., be-ginning Dec. 1, 1901, and closing June 1,

LIVE STOCK DEPARTMENT.-This important department of the exposition is now being rapidly perfected, and is going to be made one of the most attractive and important features of the exposition. PRIZES.—A large sum of money has been set aside by the executive committee been set aside by the acceptance of live stock. In addition to this many of the breeders' associations have signified their intention of offering special premiums in the breed-ing classes. Every animal winning rec-ognition at the hands of the judges will be given an exposition medal, commenwith the award, and numero medals are also to be given to animals of

TIME OF EXHIBIT.—The best interest lates arranged with reference to the other live stock shows. It will begin about December 10, when cattle will be shown for a period of two weeks, to be followed rses, sheep, swine, poultry and pet

ACCOMMODATION FOR STOCK .-Comfortable and convenient buildings will be provided for all classes of live stock. Water will be distributed among the sta-bles at points of easy access for the ani-All kinds of hay, grain and stray furnished by the exposition at nominal prices. Proper precautions will be taken by the authorities against dis-ease, and all buildings will be thoroughly disinfected after being used by one class of animals before the others will be ad-

ation will have a display of beef cat tle, illustrating the progress this great industry has made in the last few years. Beginning with the buffalo as it was found in the western plains and coming down to the present development of live stock. Amost every city and town in America is supplied with this choice qual-ity of beef, which is a product of the

reat west. The different breeders vie with each other as to the supremacy of their breed to produce the best quality of beef at the est price. These breeds will form an iteresting feature in the live stock ex-

BREEDERS.-Recognition will be given the following breeds of cattle: Shorthorn Herefords, Aberdeen-Angus, Galloways Jerseys, Guernseys, Holstein-Friesian, Ayrshire, Brown Swiss, Red Polled, Dutch Belted, French Canadian, Polled Durhams, Sussex, Polled Jerseys Kerrys and Simenthols.

POLLED DURHAMS.

Editor RURAL WORLD: In the article on Polled Durhams in your issue of March 13 are two typographical errors. The statement that "Single standard Poiled Durhams have a slight admixture of native Mulley blood recorded in Short-horn Herdbook" should have read, "and are not recorded in Shorthand Herdbook." And "7th Duke of Nillhurst" should read "7th Duke of Hillhurst." I would not have troubled you about these small errors, but in matters of record a very little

change often makes a great difference.

Knox City, Mo. W. M. COTTEY.

Errors, typographical or otherwise, aralways a matter of regret, but the RU

BEEF CALF RATIONS.

The season is here when young calves abound in the farmer's barnyard, espe-cially that class of calves which will ventually find their way to the butcher's barryard these same calves might yield larger returns for labor expended on the mand for the feed fed them. Anaomical physiology as affected by food ations and good beef on the market at sying prices are more closely related. than most calf growers are aware. The choice beef of the day is grown, not fatted. When this fact is realized farmers will secure better prices for "bossle."

The successful beef feeder says that The successful beef feeder says that calves must never be neglected and must have such rations that will make bone and muscle. Do his results prove his theory? If so, why should not every farmer raising calves for beef feed on the same lines? The analysis of the food nature produces for the young calf—the mother's milk—should be a guide for a ration. Then, too, in the natural environment the calf is dropped in spring time, when grass is abundant. This should dictate, also, that succulent foods should be provided. Though the cow's milk is a perfect food, supplying nutriment for the entire system, yet the element predominating is nitrogenous. This should enable the farmer to select foods markedly nitrogenous in character to supplement the cow's milk.

If the farmer concludes that this is too bookish and that he knows corn is good feed, and will continue to feed it and tit the calf in the front yard in one spot alves must never be neglected and must

the calf in the front yard in one spot until the grass is eaten out at the roots, or will the him in the shade of a barbed wire fence and feed him foods without knowing the effects produced by them, the results will be very similar to those of past experiences, and the sleek, smooth calf will be only a dream. The more the beef feeding problem is studied and market results noted, the more convincing in of exhibitors will be consulted and the the fact that a ration must be furnished calves that will enable the farmer to grow beef.

STOCK NOTES.

HERD OF BUFFALO.—Charles Allard of the Flathead reservation, near Kalispell, Mont., has a herd of about 275 buffalo. He proposes to select seven or eight of the finest specimens from his herd and exhibit them at the Pan-American Exposition at Buffalo the coming summer.

RED POLLS IN DEMAND.—L. K. Haseltine, the breeder of Red Polled cattle, Dorchester, Greene Co., Mo., writes to the RURAL WORLD that there is a good demand this spring for cattle of this breed. He has sold 22 head of young registered stock within the last three weeks. These have gone into five states. We are glad to note the growing popularity of this worthy breed of cattle.

POLLED ANGUS PRICES.—At a recent three day sale in Chicago 143 Aberdeen Angus cattle were sold, realising the sum of \$68,865, or an average of \$481 per head. This is the greatest average ever made in the world on a like number of cattle of any breed. The highest priced cow was imported Kirivina, to Contine Bros. & Stevenson. Holstein, Ia., for \$1,700, and the highest priced bull was Orin of Long Branch, to A. C. Binnie, Alta, Ia., for \$1,200.

GENTRY BROS., Sedalia, Mo., have a few young bulls that can be bought at snap prices if taken soon, as they need the room for their young calves. Their consignment for the Kansas City sale on April 22-23 is coming along nicely: They will have some plums in this sale when the bell taps. Look up their advertisement and go and see the herd. You will never regret the trip, as the Cedar Vale is one of the pleasantest fine stock farms to visit we ever had the pleasure of seeing.

of seeing.

JOHN MORRIS of Chillicothe, Mo., one of the oldest and most reliable breeders of Shorthorn cattle, Berkshire hogs and Cotswold and Shropshire sheep in the state, is putting in an excellent consignment of Shorthorns in the sale at Kansas City, Mo., on April 22-22. He is also offering at private sale a most excellent lot of young Berkshire sows bred. They are good ones and can be bought worth the money. He has one of the largest and best herds in the state. Look up his advertisement and write him; or better, go and see them.

MR. HARRY GRAHAM, the young but popular live stock auctioneer of Chillicothe, Mo., has a card in this issue. Mr. Graham is very popular in his home and adjoining counties. He assisted in the great Sotham combination sales at Kansas City recently, showing his worth at a large sale, and he has several other large sales on hand. He will be pleased to hear from anyone wanting his services. Mr. Graham is a very pleasant gentleman and will surely make his mark as an auctioneer. If you want any one in his line give him a trial.

SHORTHORN PRICES.—At a late Shorthorn sale at South Omaha, on the first day of the sale the highest price for any cow of any breed now living was paid. This animal was Sweet Violet II. and was sold to G. M. Casey of Missouri for E. 706.
Golder Abbottsburn was sold to Col. Golden Abbottsburn was sold to Col. The sales and purely

choice specimens in the herd selling at the highest prices is \$914.83.

GUDGELL & SIMPSON of Independence, Mo., are advertising their Hereford the oldest in America and one of the very best. It has furnished stock to start more herds and more outled the oldest in America and one of the very best. It has furnished stock to start more herds and more outled to the oldest in America and any other more herds and more outled to the oldest in America. The herd at this time to the oldest in America of the herd at this time. Dandy Rex, Militant, Beau Brilliant, son of Heau Brummel, dam a cow by Don Grios, in service.

Beau Brummel, dam a cow by Don Carlos, in service.

Beau Brummel is one of the greatest sires of the breed and is too well known to need special mention at this time. Dandy Rex was the first prize aged buil at the Kansas City and Chicago shows last fall and headed the first prize aged herds at same show. Militant is by Beau Brummel, dam by Don Carlos, and is the sire of the invincible Mischerf Maker that has never been beaten in class or sweep-stakes; also the sire of Cleopatra, for which Messrs. VanNatta & Son paid \$1,000 at the late combination sale. Heau Brilliant is a great deal in the herd. He weighs at 3 years 2,000 pounds. This herd is founded on the Anxiety strain combined with the best of other strains that the highest skill and judgment said would nick best with it and that the judgment was good is shown by the splendid success attained in the past.

With the four noted buils in service, this herd will surely continue to produce prize winners. The herd contains a splendid lot of young buils and heifers that are for sale. Measrs. G. &. will be pleased to show their cattle to anyone wanting a good Hereford. If you have never visited their herd it will pay you to do so and see one of the greatest collections of Herefords in the world.

J. F. FINLEY, Breckenridge, Mo., who has a most excellent herd of Shorthorn

general it will pay you to do so and see one of the greatest collections of resecone of the greatest collections of resecone of the secone of the greatest collections of resecone of the secone of th



to send for our Oatalogue No. 6, quoting prices on Buggies, Harness, etc. We sell direct from our Factory to Consumers at Factory Prices. This guaranteed Buggy only \$31.50; Cash or Easy Monthly Payments. We trust honest people located in all parts of the world.

Write for Free Cate

CENTURY MANUF'C CO., East St. Louis, III.

HEREFORDS GUDGELL & SIMPSON 600 HEAD IN HERD. Independence, Mo.

Shorthorn Cattle Bates and Bates Topped As good blood as the breed contains. Imp. Nonpareil Victor 183673, Imp. Blackwatch 168384. Grand Victor 18783 and Windsome Duke 11th, 131632 in service. Young stock for sale. Come and see or address. On BOTHWELL, Netten, Mo.

IDLEWILD SHORTHORNS!

cial offering, 39 yearling bulls, 39 yearling heifers. Largest herd in the State and 80 pur-hank cown. Also some Booth females. The great sire Godoy lifets in service, note his breeding by Imp. Spartan Hero 1793s, out of Imp. Golden Thistie, Vol. 38, by Roam Gannitek, Godes Champion of England. This blood made Curickshank famous. W. P. HARNED, VERMONT. COOPER CO., MO

CRYSTAL SPRINGS SHORTHORNS iness families, and aired by Chief Violed 411 and Wooddale Viotor 128017. Come and ser J.F. FINLEY. Byschemyidge. Mo.

Shorthorn Bulls. d good pedigrees. Write for prices.

W. H. FULKERSON & SONS,

Hereford Cattle FOR SALE!

J. A. STEWART, Columbia, Mo.

H. A. BARBER.

Shorthorn Bulls For Sale I have a choice lot of young bulls of Scotch. Boo and Bates families; also a few helfors for sale wit calf, and turtle intending purchasers and those it terested in good cattle to call at our farm, for miles west of Windsor. The best located herd Mo. for southern purchasers. All stock put on cal

H. W. KERR,

Camp Creek Herefords.

CATTLE-Receipts have been very limited here, and in no way sufficient to supoly the demand. Heavy weight steers dis lay an advance of 10c over the close of last week, while the light weight, handy butcher steers are 15c to 25c higher. Cows and heavy heifers show advance of abou 10c, while light weight butcher heifers are 15c to 25c higher. Best stockers and feeders closed steady to shade higher, and common, light stockers and yearling were about steady. Veal calves were about 25c per cwt. higher. Fat bulls, also stockers and feeders, show about 10c advance. During the week milkers sold at full range of \$20 to \$43, bulk \$30 to \$38. There was also a strong inquiry during the week for good feeding steers, and several orders were here that could not

be filled. Best native steers, strictly fancy cattle 1,300 to 1,600 pounds average, \$5.75 to \$6 Choice export steers, 1,300 to 1,600 pounds average, \$5.50 to \$5.70. Good shipping a export steers, 1,300 to 1,600 pounds, \$5.20 to \$5.45. Fair to medium shipping steers, 1,300 to 1,450 pounds, \$4.65 to \$5.15. The bulk of the native beef steers averaging 1,300 pounds and upwards were of medius to good quality, sold at \$4.90 to \$5.35, and the top was \$5.50 for 1,465 pound offerings. Steers, 1,290 to 1,290 pounds average, full range, rough to best, \$4.50 to \$5.50, bulk of sales at \$4.55 to \$5. Steers, 1,000 to 1,130 pounds average, full range, \$4 to \$5.06, bulk of sales at \$4,25 to \$4.85. Steers weighing less than 1,000 pounds, full range, \$3.5 to \$4.25; bulk sold at \$3.85 to \$4. Feeding steers, fair to choice, 800 pounds and upwards, \$3.50 to \$5, the bulk at \$3.90 to \$4.50, and they were fair to good quality. Com-mon to choice stockers, \$3 to \$4.75, bulk at \$3.50 to \$4.15, and the quality was medi-um. Stock helfers full range, \$2.35 to \$4.40,

the matter of the course, and the control of the course of

HEREFORD CATTLE!

100 Head Shorthorns n herd; young stock of both sexes for sale. ruickshank buil Duke of Hardson 1239 ead of herd. M. H. H. Stephens, Bunceton

N. E. MOSHER & SON, Salisbury, Mo.



Shorthorn Cattle,

ucks for sale at reasonable prices. tch bulls Violets Prince 145647 and G JOHN MORRIS, Chillicothe, Mo.

EDGEWOOD HERD, POLLED DURHAMS. The largestand best bred herd west of the Mississippi River. Bulls for sale.

A. E. BURLEIGH, Knox City, Knox Co., Mo.

Double Standard Poiled Durham and Registered Shorthorn Buils for sale. Young Victor Hi P. D. H. B., 186322 S. H. B., at head of lerd, Telehone from Depot DOD & COTTEY, Knox City, Mo.

A DEHORNER The proper dehorner is a Polled Durham Bul Write or call in reference to same, G. W. JOHNSON. Lexington, Mo.

Aberdeen-Angus Cattle.

RAVENSWOOD HERD

SHORTHORNS

125 head in herd. 20 buils for sale from 6 to 15 mo old. Scotch and Scotch toped. Herd headed by (Lavender Viscount, 18756), the champion Short horn buil of the Kansac City Show, 1906.

C. E. LEONARD, Bell Air, Mo. MD, PATTERSON, Manager.

B. B. and telephone station, Bunceton. Mo

ENGLISHED POLLED CATTLE fine stock. #Fyour orders solicited. L.K. HASELTINE, Dorchester, Green Co., Mo.

CEDAR VIEW AND GROVE HILL

SHORTHORNS is 1999 at head of herd, Young stool Call or write. POWELL BEOS., Lee's Summit, Mo. SHORTHORN CATTLE.

ire Hogs, Angora Goats, Light Brahma and Seabright chickens. Stock and eggs for J. J. LITTRELL, Sturgeon, Mo.

CATALOGUES for Shorthorn sales compiled or furnished complete at attractive prices.

Address THOS. P. HALL, Breckenridge, Mo. Kentucky Aluminum Stock Label. The Best, Lightest, Most Secure. Easiest Put on and the Cheapest. For description and sample ad-dress F. H. JACKSON & CO., Winchester, Ky.

Clover Leaf Farm HEREFORDS
From the best imported and native strains. Farm
situated 2 miles from station; telephone at farm.
Visitors met at depot if desired. Correspendence
solicited. Young stock for rale at all times. W.
G. SWINNEY. Buis D'Aro. Mo., Greene Co.,
on Memphis R. R.

ZENOLEUM killelice, ticks, mites, fleas, etc. on all kinds of animals and poultry. Gives Internally it drives out worms. Cures al cuts, wounds, seres, etc.
Non-poisoners. Endorsed by leading veterinarians. "Veterinary Advisor" free.

Econor Disinfectant Co., Box 35, Detroit, Eich.

AUCTIONEERS.

JAS. W. SPARKER, Marshail Mo. Am selling for the best breeders everywhere. Posted or pedigree and individual merit, Terms low.

J. WEST JONES, LENOX. 10WA, and OAREY M. JONES, DAVERFORT, 1A 10WA'S LAVE STOOK AUGMONNES. Write before claiming dates. R. L. HARRIMAN, Live Stock Auctionee. Bunceton, Mo. Up-to-date in every particular. Am selling fo the best breeders in the country. Terms low.

R. W. MITCHELL,
LIVE STOOK AUCTIONEER,
GENTRYVILLE, MO.
I breed thoroughbred cattle and hogs, my host
of patrons say I know how to sell them. Write

HARRY GRAHAM, CHILLICOTHE, AUCTIONEER.

Monday, March 25.—CATTLE.—Receipts in native division were moderate, and prices steady to shade easier, on account of unfavorable advices received from other points. Chicago reported 21,000 cattle and the market steady to ide lower. Receipts in the Texas division amounted to about 75 cars, and prices were steady to ide lower. HOGS.—Receipts were moderate, but advices unfavorable from other points, causing the market to rule 5c to ide lower. SHEEP.—Receipts moderate; prices steady.

Steady.

The leading feature of Saturday's market was the sale of 60 head of choice 27-pound hogs, which brought \$6.15. These hogs were fed in Boone County, sold by Evans-Snider-Buel Co., and bought by the well-known packers, Nelson Morris & Co.

It will pay you Gentry Bros., Sedalia, Mo.



Grand Duke of Hazelhurst 195404 assisted by Waterloo Duke of Cedar Vale 188085, heads our here of pure Bates and Bates topped, pure Scotch and Scotch topped cows of the most fashionable families.

Stock for sale at all times at reasonable prices. Parties met at train. Farm TELEPHONE NO. 30.

SHORTHORN BULLS FOR SALE!

Saron Thorndale 125,000; Dark Hoan of April 20, 1896 at \$500, or will trade him for heifers. Also 6-year bulls by Saron Thorndale and out of dams of Essterday and Secret, those strains have been in the here the GONNES, Towards, IL.

SHORTHORNS, BERKSHIRES and JACKS

Shor; borns Scotch or Scotch Top and Bates mostly. Berkshires best blood in America and Englan-Stock of all ages and both sex for sale. Call on or address, H. H. GENTEY, SEDALIA, Mo.

BLACKWATER SHORTHORNS! F. M. MARSHAL, Prop., BLACKWATER COOPER COUNTY, Mo.

'Pasteur Vaccine'

ACKLEG PASTEUR VACCINE COMPANY, CHICAGO. Branches—Kansas City, Omaha, Ft. Worth, San Francisco.

LOUIS NATIONAL STOCK YARDS, THE LIVE STOCK MARKET OF ST. LOUIS.

cated at East St. Louis, directly opposite the city of St. Louis. Shippers should see that their stock is billed directly to the National Stock Yards.

SCOTT & MARCH, Breeders of Registered Herefords.

SAN RAFAEL HEREFORDS

AT AUCTION AT

KANSAS CITY, MO.,

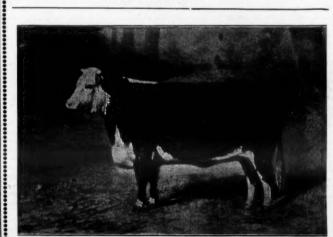
TUESDAY AND WEDNESDAY.

APRIL 2

MR. COLIN CAMERON, Lochiel, Arizona,

Will Sell at the NEW STOCK PAVILION, STOCK-YARDS, KANSAS CITY,

200 HEAD.—30 mature cows, mostly with calves at foot, 50 young cows, 60 heifers and 70 young bulls ready for immediate effective service, excel lent specimens of the Hereford breed selected from this old established herd of 1,000 head.



GRACE BEAU REAL 71062.

THERE IS POSITIVELY NO BETTER BLOOD IN THE PEERLESS GRAZING BREED.

The San Rafael cattle are bred from the strains that have proved the fountain heads of improvement of the Hereford breed—sir Richard 2d, Anxiety, Lord Wilton and The Grove 3d. All consigned to this sale were range-bred and have been raised on native grasses in the open in fenced pastures and are in a condition of most perfect health. Most of them are too young to indicate their excellence at maturity, but are in prime shape to develop fully under farm conditions.

AS A LOT THEY SHOW SURPRISING QUALITY.

The opportunity is unequaled for beginners to secure strictly well-bred cattle at their own prices. The attention of rangemen is specially called to the bulls offered. All cattle are branded with the private herd record number, so that identification is absolute. Females old enough have been bred to the Anxiety-Grove 3d-Wilton bull Woods 60437, the Sir Richard 2d-Anxiety bull Denmark 60378 or the Grove 3d-Wilton-Anxiety bull Fortune Winner 60384.

Sale will begin promptly at 10 a.m. For Catalogues address

T. F. B. SOTHAM,

COLS. WOODS, EDMONDSON and SPARKS, AUCTIONEERS.

CHILLICOTHE, MO.

Horseman.



OUTHWEST MISSOURI CIRCUIT.

Eight Continuous Weeks.

Quincy, Ill			July 22-3
Columbia	*********	July	30th-Aug.
Holden	**** ******	*******	Aug. 6-1
Harrisonvill	0		Aug. 18-10
Rich Hill			Aug. 20-21
Nevada			Aug. 21-30
Higginsville	**********		Sept. 3-1
Sedalia, Sta	te Fair		Sept. 9-14

E. T. Letton & Son of Walker, Mo., have sent their fast pacing mare inette, 2:12%, to Douglass Thomas of Paris, Ky., to be trained and raced this sea-

Secretary Geo. W. Lyon of Peoria, Ill., says that the Peoria half mile track will be in line this year as usual and claims

and the remedy given in the article is as to one as to the other.

The directors of the fair association at a Plata, Mo., have elected the following ficers: President, W. S. Sears; vicepresident, J. B. Wilson; secretary, James L. Barty; treasurer, Thomas L. Rubig. will be made to give the greatest meeting in the history of the associa-tion during the early fall of 1901.

The whole system of breeding horses that now obtains in the agricultural districts should be abandoned and breeders in the future should begin over again upon new lines. High class horses will sell at a profit in any market, while inthe cost of production and maturing for

daughters of Alexander's Abdallah, who colt comes from the noted Alcyone fam-was likewise sire of the dams of 44 stand-ard performers. This is truly a great showing for a stallion with such a lim-lah on a No. 1 foundation. This fellow stred stud career. What might have been has everything in his favor for making a written had Abdallah lived to the age great sire. reached by George Wilkes, Electioneer and other noted sons of Hambletonian 10?

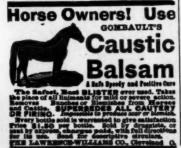
Colts foaled late in the fall require firstclass care through the winter and early spring in order to be in good condition for next summer's growth, says Columbus. One prime necessity is a warm stall in the barn. No one ever saw a shivering colt that was as thrifty and vigorous as the colt that was given suitable shelter. Colts can and have lived through a cold winter with no more shelter than that found on the leeward side of a barb wire ce, but the owner is always the loser in such experiments.

What is wanted is a family of trotters that come to speed quickly, that learn to trot fast without much work, and whose natural gait is such that no unnecessary appliances are needed. It is the fast, natural colt trotter of to-day that will make the champion of the future. Breeding necessary as it is, cannot alone produce a world beater; nerve force, trotting instinct and great class are the qualities that must be transmitted, and no horse can be expected to transmit to his get those qualities which he does not himself

stand in the water for a little while. along without poulticing the foot of a and other horses he has been using.

work horse it will be so much the better. The outlook for producing speed all over Every day at first open up the covering and wash out the wound with the carbolized water and proceed as before. In the ized water and proceed as before. In the case of a very bad puncture it is always best to at once call a veterinarian. Or-

ilmstrated catalog of all ands of buggies, road wagons, speading wagons, phaetons, stanhopes, surreys, etc., as well as harness and saddles, all made by this firm, with prices that show a large saving over goods offered by local dealers, who have to pay two profits and make their own besides.



L. E. CLEMENT'S HORSE GOSSIP.

Editor RURAL WORLD: Inactivity is a thing of the past at the office and grounds of the Missouri State Fair at Seand the funds due the association from the breeders' bill and the \$50,000 appropri-ated are all that will be available for the first meeting. Work will soon be resumed good regulation mile track. Col. J. R. Rippey is the right man in the right place as and there will be no more let up until the grounds are ready for a successful fair. Frank Culler, late of Tipton, Mo., and who owned Ham, sire of Topas, and Ham Jr., will in the future make Sedalia his home. Mr. Culler has a colt that he bred stred by Count of Paris, son of Bourbon Wilkes, dam Rustic Maid by Mambrino Russell, and will handle horses for the good pub-

Arnold Brothers have a 600 acre farm across the road from the Fair Grounds. They have four brood mares left of their extensive breeding in the past. They are among the best they have ever owned. The farm is well watered with springs and with good buildings which they are able to erect they should have one of the best breeding farms in the country.

At Lexington I found W. B. Wilson, the At Lexington I found W. B. Wilson, the owner of Alligon 31228. His first dam is by Norval, son of Electioneer, 2d dam a sister to Pilatus 2:09%, son of Onward. This fellow was sired by Madrid, one of This fellow was sired by Madrid, one of the control of the co says that the Peoria half mile that was been line this year as usual and claims July 2 to 5 as the dates of the summer meeting at Lake View Driving Park.

Carmi, Ill., will have an annual fair under the auspices of the White County Agricultural Board, September 3 to 7. Officers of 1961 are: W. A. Raglin, president; J. M. Simpson, vice-president; R. S. Season in 1900, but the mares bred were come of their choice animals. There is another interesting article on our dairy page on Lice on Cattle. The article is just as instructive to horsemen as to cattlemen and should be read by as to cattlemen and should be read by them. At this season of the year many of our colts and calves are infested with lice Wilkes, Rustic B. 2:24% and other high

bred and popular sires.
Mr. R. O. Harris, who was so liberally advertised as an escaped curio from the central wilds of Pettis county, Mo., when he went to Detroit and sold an unknown and unheralded son of John R. Gentry for \$3,500, has just returned from Kentucky, where he purchased some good colts. Mr. Harris says after selling the Gentry colt he was struck by an unconquered colt by Carlisle 5385, now five years old, and Mr. Harris thinks he will be heard from. He calls him Braxton B. His 1st dam is Nebula by Nuttingham, 2d dam Juba by Belmont, 3d dam Judith by Mambrino Chief. The horse he bought for a stock rofit in any market, while in-will always sell for less than Brook 19767, dam Miss McGregor by Robert McGregor, 2d dam Alice by Almont, 3d dam Norma by Norman, and 4th dam Forty-five sires of speed are out of the noted "Young Twiman Mare." This

great sire.
His next purchase was a 2-year-old filly bought because he expects to make of her a successful trotting race mare. Hawley (of the Stock Farm) and Gen. B. F. Tracy, please take notice, sired by Goldenslope, son of Electioneer, 1st dam Alabama by Sultan, 2d dam Cora 2:24 by Buccaneer, son of Green's Bashaw out of a pacing mare by Flaxtall, 3d dam Pearl by Blue Bull, 4th dam Lightfoot by Flaxtall, 5th dam Fanny Fern by Irwin's Tuckahoe. Where would you find a pedigree with more pacing crosses and where you find these as they are, you are in line for a fast, cheaply developed and consist-ent race horse. I think Mr. R. O. Harris will convince them all that he has found one. A 2-year-old colt bought to specu-late on is by Golden Slope, dam Alinee Rivers by Wilton, 2d dam Castona by Sentinel Wilkes, 3d dam Clara Belle, by Metropolitan, 4th dam Norma Sprague by Gov. Sprague, 5th dam Belle Scott by Norman. Mr. Harris will campaign a home bred horse by Beamer, son of Ashland Wilkes, dam by Val Knox, 2d dam an unti

John Hicklin of Sweet Springs owns Andrew Allison, sire of Albert Allison When a horse gets a nail in his foot the best thing to do is to cleanse the wound as quickly as possible, having the smith rim out the hole sufficiently to permit of Mr. Hicklin has a 2-year-old colt by Walthe cleansing being done right. This nut Boy, dam by Osman, son of C. M. washing should be done with carbolized water and it is no bad thing to make the is a standard bred trotter and bred well enough to trot or pace into the list. The nful of the carbolic acid in a Walnut Boys will always be in demand. bucket of lukewarm water will be all Ben Swigert is using the dam of Albert right. Then after the wound is well cleaned out pack a little pledget of good lint a sister to Albert Allison, the coming with a little tar next the wound; over spring, to some horse that he thinks will some horse that he thinks will with a little tar next the would, over heart as thinks will that place oakum and go ahead. This be likely to produce a crackerjack, possi-will of course require watching and per-bly his son of Baron Dillon, that is a well haps poulticing later, but if you can get made trotter, but not large, like Allison

present time. We have better mares than ever before. No state in the union has better sires. Others borrowing from Illi-nois, Iowa and Massachusetts may have cases may be dealt with all right more, but no state has better ones.

dinary cases may be dealt with all right by the simple method described.—Horseman.

THE "NEW ERA" WAGON, which is illustrated in the advertising columns of this issue, is one of the most unique, handy and inexpensive vehicles for rural use that can be imagined, and the wonder is that it has not been placed on the market before in response to the strong demand for it from every quarter by somany. It is tasty and neat, light of draught, has a capacious seat and, light of draught, has a capacious seat and, light of draught, has a capacious seat and and one of the strong demand for it is tasty and neat, light of draught, has a capacious seat and simple demand for it from every quarter by somany. It is tasty and neat, light of draught, has a capacious seat and some place of the strong demand for it from every quarter by somany. It is tasty and neat, light of draught, has a capacious seat and some place of the strong demand for it from every quarter by somany. It is tasty and neat, light of draught, has a capacious seat and some place of the strong demand for it from every quarter by somany. It is tasty and neat, light of draught, has a capacious seat and some place of the strong demand for it from every quarter by somany. It is tasty and neat, light of draught, has a capacious seat and and the some place of the strong demand for it from every quarter by somany. It is tasty and neat, light of draught, has a capacious seat and and the wonder is that it is a roan pacing some place on the strong demand for it is a capacious seat and handles her, has added a green three and handles her, has added a green three and handles her, has added a green the strong demand for it is a capacious seat and handles her, has added a green three and handle lion, under size, but bred for a sire, and is likely to be heard from. The Blue Rib bon sale to come off on the Driving Park grounds in May gives promise of being s great success.

Please inform me through the RURAL WORLD the breeding of Iron Duke, supposed to be sired by Hambletonian 10. As Iron Duke was the grandsire of a fine mare I have I would like to know his breeding.

Mendon, Mo.

Reply—Iron Duke, 181, br. h., foaled 1860, got by Hambletonian 10, dam by Miller's Sir Henry. He died in Wisconsin n 1881.

Mr. E. Knell of Carthage, Mo., writes: My mare, Stella A., trotting record 2:28%, foaled a fine bay filly yesterday by Kankakee, sire of five better than 2:18%. Knell's Pet, daughter of the great brood mare Maud McGregor, also foaled a bay colt yesterday by Kankakee. I have seven head in training now and expect to show a little speed before the bell rings.

MARE NEAR FOALING TIME.

She should be provided with suffici good, pure feed to keep her in good heart and fair flesh, not fat, but fleshy enough rounds of the Missouri State Fair at Se-ialia. The appropriation has been made that the third state the association from the breeders' bill and the \$60,000 appropri-tion the better, although a small amount ated are all that will be available for the first meeting. Work will soon be resumed on the track and within a few weeks the horses will be taking their lessons on a total source. The big source will be taking their lessons on a total source will be taking their lessons on a total source. The big source will be taking their lessons on a total source will be taking their lessons on a total source. should the mare be forced to eat musty y is the right man in the right place as cretary. He recognizes that delays are ingerous to the forthcoming meeting dithers will be no more let up until the difference of the recognized that will be no more let up until the to prevent her becoming so thirsty that she will drink so much at one time as to

become uncomfortable.

Moderate exercise is indisp Moderate exercise is indispensable to the mare growing heavy with foal and her habits should not be changed. That is, if she has been running out without work, allow her to do so, giving shelter at night or in bad weather. If she has been working let her continue in harness with careful handling up to within a few days

of foaling.

There is no time so favorable for mares to foal as when they can run on the fresh grass of May and June. The warmth of spring and the beneficial effects of a "bite" of grass contribute wonderfully to the health and safety of mare and foal. If, however, the mare is due to foal before

clover and timothy mixed, say about half and half, fed in moderation, for mares that have nothing else to do but eat will consume more hay than is necessary or beneficial. A small grain ration of oats and bran mixed together in the proportion of two parts of oats to one of bran in bulk makes a good and safe food. The quantity should be determined by the condition and age of the mare. Young mares and very old mares require more liberal feeding than mares from 6 to 12 years of age.

MONGOLD, 28625, GOES TO HOLDEN,

The Colman Stock Farm stallion Mon gold, 28625, will be in the stable of Rolla E. Brownlee, Holden, Mo., during the breeding season of 1901, where he stood last season. His breeding is first-class, having been sired by Allandorf, son of Onward, who stands at the head of all trotting sires. Allandorf's dam, Alma Mater, also stands in the front rank of all great producing dams. The "Horse Breeder," Boston, says: "Alma Mater's trio of sons, Alcantara, Alcyone and Allandorf, are so far in advance of any three sons of a single dam that she will likely stand unequaled for years. Alma Mater's six sons have sired 245 in 2:30, 91 in 2:20, 46 in 2:15, 11 in 2:10 and are sires of dams of 18 in 2:15, and 5 in 2:10. Her sons sired 12 in 2:10." Here is a showing that no other brood mare in America can make.

But Mongold's breeding on the dam's side is equally good, his dam, Monitor Rose, being the dam of Mongold, Mon-dorf, being the dam of Mongold, Mondorp. which have shown better than 2:30 on the slow half mile track of the Gentlemen's Driving Club of St. Louis, without expert training. Monitor Rose's first dam, Bay great stallion, Pilot Medium, the sire of 20 dams that have produced 2:30 speed, and of more than that number that have table. Can any richer or better pedigree

Add to this that Mongold is solid bay in color, 16 hands high, heavy bone, muscle and body, absolutely sound, kind dispo-sition, level headed, of great endurance and speed and with such qualities inherited on the side of both sire and dam he must transmit them to his progeny. While never regularly trained we quote from the records of the Gentlemen's Drivshow that he has speed and endurance: The race was over a track known to be five or six seconds slow. He won the third, fourth and fifth heats in 2:25%, 2:29%, 2:29%. Having size, substance, breeding, speed and endurance he is a stallion well worthy of patronage.

Henry Wilkes, by Ashland Wilkes, 2174, sire of John R. Gentry, 2:004, will be the stable companion of Mongold. For a more extended pedigree of both these stallions read their advertisement in this is-

HORSES RUBBING TAIL.

worms in the rectum is also frequently the cause of tail rubbing. Epithelial ex-foliation is more rapid at the roots of the tail and mane than at other parts of the body and more work is necessary to keep these parts clean than elsewhere, says the "Breeders' Gazette." Where the tail is thoroughly cleaned by hard brushing daily and washed occasionally the part is unlikely to give trouble, but where this is not done and at the same time the animal is idle and heavily fed upon corn or other grain, the part becomes itchy and ves sicles may even appear, followed by

scabs.

The first step in the treatment of tall rubbing cases that are just commencing is to cut down the grain rations and open the bowels with soft food and glaube salts at the same time, giving the anima an abundance of exercise or work daily and the tail a thorough washing with soda and water, and when dry saturating the part with a creamy solution of flowers

KILLED-DEAD.



You know that the horse buyer knocks off \$50 or more for every lump or blemish on a horse. Get full value for your horse—don't have any lumps. Cure him with Tuttle's Elixir.

feit of \$100. to cure any case of horse ail, curb, apisints, contracted cord, callouses, thrush, etc.
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Dr. S. A.

plication should not be washed off and may be repeated in a few days if neces-

tea and soapy warm water. In chronic cases of tail rubbing where the sulphur and oil have failed to effect a cure, the animal should have a half ounce applied medicine every morning. At a friend told me to try concentrated the sulphur and oil have failed to effect a cure, the animal should have a half ounce of sulphur and \mathfrak{D} grains of powdered nux vomica twice daily, and the food should be cut down to hay and water with a few bran mashes weekly with carrots to keep the bowels open if the sulphur has not a sufficiently laxative effect. After a thorough cleansing of the hall it should be cut and pushed it in the hole with a small stick, then put a little cotton in to prevent in from coming out. Next morning I synthesis and water through the same process three times, every other day, and it was well and did not leave a scar nor swelling. ough cleansing of the tail it should be wetted several times daily with a lotion made by slightly acidulating water with sulphuric acid, then sweetening it with carbolic acid. Should this fail the following may be tried: Carbon ash, two drams, cyanide of two grains; water, one quart. Use twice daily.

Veterinary.

Answers to questions in this department are given by Dr. T. R. White, former State Veterinarian for Missouri, Sedalia, Mo. Write questions on one side of paper only, and separate from other business. Those wishing a written reply privately must accompany their requests with a fee of one dollar, the professional opinion being one of private advantage.

VETERINARY DEPARTMENT.

RINGWORM.—I have a yearling calf which had a cluster of warts on its leg.

The calf now has warts coming on it all over-about twenty. Will you please give a remedy for seed warts J. M. MARTIN. Franklin Co., Ill.

If the excrescences are really warts apply the following once every day; One ounce of gum camphor dissolved in a half pint of good castor oil. Rub in well with the fingers. We rather suspect that what you believe to be warts is in reality ringworm; if so, it usually disappears by the time the animal is a 2-year-old.

COCKED ANKLES .- I have a fine, 9 month-old saddle bred colt that has both hind ankles swollen, and the leaders are contracted, so the colt walks as if trying to walk on its toes. The ankle is ben forward instead of backward in a natural position. Two weeks ago this colt was position. Two weeks ago this colt was as sound as a dollar. The ankle had a nice spring and was all right. I don't know what caused the frouble, unless the rain blew in and kept one side wet before I noticed it. —W. O. BACON. Leftore Co., Miss.

This disease is sometimes due to a sprain of the suspensory ligament, and in

young animals it may have its origin in improper foods. As you do not state what you have been feeding it is hard to tell the real cause of the weakness. Have you examined the feet carefully? The colt may have scratches or perhaps thrush is in the foot; either will cause knuckling of the fetlocks. If, however, the feet are Wilkesgold and Electeer, all of healthy the trouble may be corrected by correct feeding and proper exercise. Give good clean timothy and clover hay, oats and wheat bran and plenty of exercise in the sunlight in clear weather, stabling it training. Monitor Rose's first dam, Bay Dixie, was by Abdallah Jr. 5720, son of Abdallah 16; second dam Dixie, 2:30, to wagon by Pilot Jr., sire of the dam of Maud S. 2:30%, to high wheel sulky, and Maud S. 2:30%, to high wheel sulky, and make the coit bridle-wise and it will not Maud S. 2:09%, to high wheel sulky, and full sister to Tackie 2:26, the dam of that great stallion, Pilot Medium, the sire of 20 dams that have produced 2:30 speed, and of more than that number that have that full wheel that have the colt bridle-wise and it will not be long before it can be hitched to a light cart. In this way he will get more benefit from the exercise than if allowed the three of these dams, first, second and third, are producers of better than 2:30 speed and all in the Great Brood Manager third twice a day rub the legs well when you come in from the hock down to the hoof, applying the following while have been considered to the constant of the constant allowed the run of a lot. After a half hour's work twice a day rub the legs well when you come in from the hock down to the hoof, applying the following while have the constant of the constant allowed the run of a lot. After a half hour's work twice a day rub the legs well when you come in from the hock down to the hoof, applying the following while have the constant allowed the run of a lot. After a half hour's work twice a day rub the legs well when you come in from the hock down to the hoof, applying the following while have the constant of the cons bing: Fluid ext. of beliadonna, 2 ounces; tincture of aconite root, 1 ounce; grain al-cohol, half pint, and water sufficient to make one quart.

SPRAINED BACK.-Will you or RURAL WORLD reader tell what is the matter with my horse? He is a 4-year-old and was broken when 3 years old. He has never been hurt externally. Last summer he commenced to get weak in his hips and would fall down at times. He kept getting worse until now he is very weak ing Club of St. Louis one of his races, to in and wabbles in his hind quarters when he walks fast or trots. The horse is good flesh and has a good appetite. A SUBSCRIBER

Richmond, Mo. Your horse has received an injury in his back in the region of the kidneys, the treatment of which depends largely on the nature of the hurt and the reaching of the exact spot. It may be a sprain of the large psoas muscles lying just under-neath the backbone, or it may be the backbone itself is injured; again the ligaments that bind the bones together may have been torn loose from their bony at tachments or some of the bony prolongations may be fractured. However, to give a general treatment and just blister the back may do some good. Have your frood, lack of exercise and warm, poorly ventilated stables. Idleness may also be considered a cause. The presence of pin worms in the rectum is also frequently the cause of tail rubbing. Epithelial expectations and apply another. ony prolongs

back clean and apply another.

INDURATED UDDER.—Please tell me what is the matter with my cow? She has a little calf one week old and seemed to do well, but she is getting very weak and thin and reels as she walks. Her udder is swollen very large and the swelling extends up under her body. We have rubbed coal oil and lard on the udder and the swelling has gone down some, but she is so very weak. She gives quite a good deal of milk. She has had all she can eat all winter of Kaffir and cane, crushed corn with cob and sheaf oats, some hay and plenty of good water, and a good shelter. She is two years old and has had the same care that the rest of the cows have. Is there any remedy for her?

Audrain Co., Mo.

If she did not clean well after calving

Audrain Co., Mo.

If she did not clean well after calving you can suspect the cow is either suffering from septic blood poison or from a croupous condition of the udder. Treatment: Dissolve one pound of epsom saits in one pint of water and drench her. Repeat until four doses are given, each at an interval of every four days. Several times a day bathe the udder for at least 15 minutes with water as hot as can be borne, also kneading it well at the same time; before applying the hot water see that she is milked clean. Discontinue the cane and Kaffir corn and in its place give either timethy or prairie hay. The other foods are all right.

SADDLES per solid leather trees
back. Warranted not to hurk. Wholesale prices
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the produce to consumer. Send two (4) cent simple
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WANTED TO SELL OR TRADE a first class Saddle Stallion. Horse is young, sound and all right; will sell for each or trade for Perheron Stallion of equal merit. For pedigree or that information address.

I see in the RURAL WORLD that Mr sary. If pin worms are found to be the cause they may be readily killed by injecty, Mo., has a mare that has fistula and those of a decection of quassia chips wants a remedy. I will give him my except (steeped for twelve hours), or of tobacco had one last summer and doctored her for six months-had a horse doctor from the ny mare was ing.

car nor swelling.

This is a very humane method of treat ment and while it may not cure in ever

ease it costs nothing to try it.
H. F. KNIPPENBERG.

BUGGIES! BUGGIES!

The Century Manufacturing Company of East St. Louis, Ill., are the largest manufacturers of buggles and surreys in the United States. They sell direct from their factory to homes at factory prices. They are consequently in a position to save the customer from \$20 to \$40 on the purchase of a buggy and from \$40 to \$80 on the purchase of a surrey. The Century buggles are without a doubt the best manufactured in the United States. They



sell for cash or on easy monthly payment plan, and they will be pleased to extend credit to honest people living in all parts of the country. They are offering a regular \$75 buggy for only \$55, and it is fully guaranteed for three years. The Century buggles are the only buggles in the market that are warranted for three years. We would suggest that our readers write to the Century Manufacturing Company of East St. Louis, Ill., for their free buggy catalog, and in so doing please mention the fact that you saw their advertisement in the RURAL WORLD. We call our readers' attention to their regular advertisement which appears elsewhere in this issue.

CAUSTIC BALSAM.—Having read ar advertisement about your Gombault's Caustic Balsam I have tried some of it and think it excellent. Big Flats, Wis.

H. H. Hamer, Vermont, Ill. Kind Sir: I wish to say a few words in praise of your Sure Cure for Fistula. I applied it to a fistula three times and within 30 days he was well and I was working him. I can cheerfully recommend it to anyone. It is the stuff. Send me some of your circulars and I will distribute them among here. Yours truly. Yours truly, CHAS. S. HODGES. Paragon, Ind.

ALLIGON 31236

The best, bred Wilkes Electioneer Stallion is the state combines the blood of Abdallah, Geo Wilkes, Electioneer and Egbert. For pedigree W. B. WILSON,

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CAMBRIST 12287 By Wonder, Son of Blue Bull.

The only Blue Bull horse in Missouri and possibly the best bred horse descended in the male line from Blue Bull 75. A trotter himself and a sire of trotters. Write for tabulated pedi-gree, terms, etc., to gree, terms, etc., to JAMES HOLLISTER, Rockville, Mo.

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A choice collection on hand. All blacks, mostly coming 3 years old, some older. Absolutely the best that money and experience could procure. Anyone wishing to purchase a first-class young stock. I also have on hand two bay Belgian stallons. 10 years old, good and sure breeders, for sale at a bargain. Correspondence solicited. Elysaton is on the Wabash R. R., is the second station east of Ecokuk, lowe, and of miles north of Quincy, Ill



SADDLE STALLIONS 4 Saddle Bred Stallions, duly TOM BASS, Mexico, Mo.

The Saddle FOREST KING



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TWO BLACK
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Also Trotting Stallion Dictatrum No. 27830, sired by Patenter and he by Pancoast ist dam by Dictator, etc. Also Saddle Stallion Rex Hose Denmark No. 551, sired by Rex Denmark 1st dam by Montrose. This stock will be sold right. Call on or address,
JACOB THOMAS & SON. Knox City, Mo.

PERCHERONS—A few young, black, reg. stallio and mares at low prices. Also 330 acres Kans land. A. M. WALKER, Laclede, Mo.

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soothes, so alleviates aches and pains quicker
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Family size, 35 cents. Horse size, 50 cents and \$1.00.
Ask your Dealer or Druggist for it

Prepared by Dr. Earl S. Sloan, Boston, Mass **********************







SEASON. 1901.

Monitor 1327; 2d dam Bay Dixie by Abdallah Jr. 5720; 3rd dam Dixie by Pilot Jr., sire of Maud 8.; 4th dam Jenny Lind by Bellfounder.

HOLDERY WILKES, sired by Ashland Wilkes, 2:17½ (sire of Jno. R. Gentry, 2,00½ and others in 2:30; 1st dam Bonnie C., by Joe Elmo; 2d dam Nettie by Blackwell's Hambletonian, Jr.; 3rd dam Molly by Bay Eagle, thoroughbred son of the great Grey Eagle. These Stallions are not only royally bred but bred right. MONGOLD stands 16 hands high, good flat bone. weighs 1200 lbs., and has shown his ability to trot in 2:15; has a record of 2:34¼. Will be marked this year.

HENRY WILKES is a noted show animal, possessing more style and beauty than anybody's horse. Awarded 1st premium in Roadster and all purposes, wherever shown; two \$40 silver medals Kansas City Inter State Fair.

For extended pedigrees and terms, address

ROLLA C. BROWNLEE, Holden, Mo.

VELOCIDAD 1490I, Bay horse, foaled April 1, 1899; bred at Woodburn, Ky; both hind feet white to ankle; 16% hands high, weighs 1850 lbs. He is the sire of Ladykin, record 2:30 Manakin, bay golding, foaled May 14, 1950 worked in 1890 only and trotted the Woodburn track in 2:38 in August, 1899. He was sired by Electioneer 126, Dem Nutuals by Belmont 56, 2nd dem Miss Russell by Pilot Jr. 12. Here is a horse bred to get something that is large enough to drive as a harness at trotter as a smaller one and he is certain to get something that is large enough to drive as a harness as a manufacture of the stand driving the season of 1901 at my piace, 15¢ miles west of Breckenridge. "Tell May - 100 miles and the colt is cold or when the mare is traded off, transferred, by manufactured without my written consent, or moved out of the neighborhood. Grass at \$1.50 per month, Grain fed by agreement at reasonable prices. All due care to prevent accidents, but will not be responsible should any occur. All lovers of horses are invited to come and see the horse at any time.

H. D. AYRES, BRECKENHIDGES, MO.

LAFAYETTE STOCK FARM'S



Great Stud of High-Class Stallions. and one of Black Percherons and Beigians, and now have two importa-tions of German Cosch and Black Percherons on the way. We have more high class German Cosch Stallions than all others combined. Our im-portation of Black Percherons is of the highest type: everyone will weigh when matured 2.000 to 2.600 pounds. We also handle large trotting bred stallions. We have imported more stallions since 1832 than any firm in antee. Lafayette is ill miles. All horse sold on a responsible guar-antee. Lafayette is ill miles on the main line of the Wabsah from on and Big Four Eallways, also on the main line of the Wabsah from the to Tolsdo.

1901. 1901.

PRAIRIE VIEW STOCK FARM,

Will keep for service the following stock:

WALNUT BOY 2:112, Brother of { Bellie Andrews 2:06% Victorine 2:20. Sire of Gyp Walnut 2:08¼; Walnut B. 2:12¼; Robbie C. 2:14¼; Dan T. 2:16¼; Monnut 2:17¼; Joseph R. 3 yr. 2:22¼; Dr. Port 2:80.

ONWARD BOY, by Onward Fewel, record 2:11½; 1st dam by Walnigh and one of the best gaited trotters in Missouri.

ALLISON BOY, by Walnut Boy 2:11½; 1st dam by Andrew Allison sire of Albert Allison, 2:10½ and others, 2d dam an inbred Clay mare. I consider Allison Boy, one of the best, if not the best, son of Walnut Boy 2:11½.

SUNSET SENIOR,

Standard and registered, saddler, goes the gates and cannot be beaten for style.

All of these horses are standard bred. I also have six Jacks, all black, from 15 to 16 hands high. Stock for sale. For full particulars and pedigree, apply to

J. G. CALLISON & SONS, Windsor or Lecton, No.

REX MCDONALD, Champion Gaited Saddle Stallion, will make the season of 1901 at the stables of HISEY & LEE, Mexico, Mo., at \$25.00 the season, with return privilege. If you wish to breed, book your mare at once.



German Coach and Percherons.

Three importations in 1960. First of 1961 arrived March 2d. As the last Illinois state Fair we took 15 prises out of a possible 16. Cur buying facilities are unsurpassed, as the oldest member of the buys 25 per cent cheaper that a couple of big stock farms. He buys 25 per cent cheaper that a couple of big stock farms. He buys 25 per cent cheaper that a couple of big stock farms. He saw the couple of the c

Leer. OLTMANNS BROS.,

TWO EXTRA GOOD JACKS FOR SALE! 16 hands high, heavy bone, well broken, prompt sure performers, sure foal getters and the best of reeders, 6 and 7 years old. Coist to show. None better. Also a splendid 16 hand stallon, sired by ashland Wilkes, whose dam is sired by the sire of Joe Pacheon, a splendid breeder. Also seems good tennets. Stock shall be an expresented.



ok on Barren Mares and Sterility Stallie C. C. LYFORD, Minneapolis, Minn. THIS BUGGY DIRECT



D. R. THOMAS, Monett, Mo. of Horses and Jacks. Shorthorn Cattle Chins Hogs, Barred P. B. Chickens and

FISTULA, POLL EVIL and all Blemishes on horses cured with HAMBER'S BLUE LEMBER IN THE HAMBER'S BLUE LEMBER OF THE LEMBER OF THE LEMBER OF THE LEMBER OF ALL LEMBER OF THE LEMBER OF T

FOR SALE 14 Black Jacks Kentucky and Tennessee breed to 5 years old, 14½ to 16 hands high. R. M. JOHNSON, Bolivar, Polk Co., Mo.

TRACELESS HARNESS BAKER'S (LATEST AND BEST)
Write for circulars and prices B. F. BAKER & CO., Burnt Hills, M.Y.

Home Circle.

When twilight came on wings of gray And covered up the sweet, dead day, With stars for leaves—as, we are told, The Robins did the Babes of old!— We'd cluster 'round our father's cha For he had stores of legends rare.

How baby Willie laughed with glee At monkey stories, when he'd see
The shadows on the fire lit wall
Or grinning monkeys, large and small,
Till drowsily would droop his head,
And mother tuck him snug in bed,

Then we were humored in our turn with Flodden Field and Bannockburn. And tales of border feuds and wars 'Mong Grampian Hills and Lowlar

scaurs.
Wallace and Bruce and Mary then
Woke Scotland's past to life again.

E'en as our father's hands outlined The shapes that pleased the baby's min His words, with weird, poetic art, Threw shadows on each youthful heart Till we beheld, through smiles and teal Those phantoms of historic years.

Since then long years have slipped away Since then long years have slipped awa And our once sunny locks are gray. But still we feel his presence near, When twiight comes—his voice we hear-For memory shrines, with loving care, Our father in his old arm chair. St. Louis Co., Mo. ADELA S. CODY.

Written for the RURAL WORLD. FROM SUNNY SLOPE FARM.

When we came into possession of Sunny Slope Farm, there was, east of the house, about one and one-half acres of ground,

stone fence, well laid, will last for generations; forest fires could not cross such a fence or destroy it. Only a young cynot a moment's notice; a swift, icy blast

The rocks must be taken off the fields, not only for the good of the growing crop, but because of the "wear and tear" to not only the plowshares, but to the man and horse as well. With the stones al-ready on the wagon, it is but a little more and horse as well. With the stones already on the wagon, it is but a little more work to make them pay rent. When we finish clearing the ground we will tell for houseplants, we went in a rig into you the length and height of fence built by stones from this piece. stones from this piece.

found many of the young trees dead, and had to be replaced. The ground being "new" will bear a good crop of anything planted, and, I suppose, each plowing will unearth more rock, which will be "carted off" to help out the "line" fence. It is slow work for the gude man alone, so I am "taking a hand" at it, too, and I quite as proud of "our fence" as he is. extle is still with me-why

stead of rail fences—especially the "line"

ractical experience enough to judge as o that; but I know we have an a garden, and there is a great scarcity of rock or gravel there. I have never heard of anyone who has persistently tried to do away with the rocks. But there is one armer down here who intends to try to solve the problem.

The land is not all rocky. There are

spots where there are comparatively few; other spots where there are no small rocks or gravel; others, again, where all are small; or all gravel. But the very small rocks will not hinder the use of the cultivator, planter, reaper, mower, etc., and if these could be used it would ma-terially add to one's income to do so. We have the loveliest canned fruits! I gathered as I canned them, and they were not even wilted before they went into the Aunts and uncles and cousins, a starchy orcelain kettle. I have never lost a

porceian kette. I have never lost a jar of them, and we find them perfectly delicious. We have peaches, pears, plums, cherries, gooseberries, blackberries, tomatoes, that really are better than the fine California fruits in taste.

The coming summer time I hope to put up more varieties, besides trying my

Very few have cellars under their houses; not many have outside cellars; but store what apples or vegetables they

could blow it down, and it would a strong horse to push his way gh. sening the severe cold. They were so unprepared that it seems a miracle to them that they were not frozen to death. Then we called to mind a storm we passed through in the mountains of New

an outing. The sun shone brightly; flow-ers of the most intensely deep shades decked the mountain sides in prodigal profusion. The sweet life-giving balsam scent from the pines seemed to renew our youth and we found ourselves scrambling among rocks and down steep declivities for floral treasures, gathering armfuls to take home with us. The little ones clamored for dinner, so we spread our tablecloth on a soft bed of decaying pine needles, under the shade of a monarch of

are still usually laid fat on the ground, to rot out with moisture in a brief while, when they would last much longer if these rocks were utilized to keep the ends off the earth, and to fill in under the bottom rail. Is there any good reason for this?

One of our correspondents was speaking disparagingly of the "shovel plow" and other old-fashloned farm tools; but so long as the rocks are left on the surface and in the surface, so long, I should think, will we have to stick to the old "one-horse" affairs, or the double shovel; the scythe, the cradle, and such slow implements. It is small wonder that the bays, as they grow to manhood, look away to fairer fields and energies to a better paying business than the following of the one-horse plow, or swinging of the old-time scythe and energies to a better paying business than the following of the one-horse plow, or swinging of the cold-time scythe and cradle in the rocky harvest field.

A farm in this rocky region should be put down to grass as rapidly as possible, and shocked with sheep, cattle, hogs and horses. Whenever the land is plowed for "rotation," the rocks should be as cleanly gathered off as possible, as the plowing is done. Putting the rocks in piles for the convenience of loading into wagons, is not hard work, and children could do the most of it. It is wearing on one's hands, but with proper protection this could, in a measure, be obviated. I may be millions of mothers for their will be a stream that sould be as cleanly gathered off as possible, as the plowing is done. Putting the rocks in piles for the convenience of loading into wagons, is not hard work, and children could do the most of it. It is wearing on one's hands, but with proper protection this could, in a measure, be obviated. I may be a such as a cleanly gathered off as possible, as the plowing is done. Putting the rocks in piles for the convenience of loading into wagons, is not hard work, and children could do the most of it. It is wearing on one's hands, but with proper protection this c

THE OLD DAGUEROTYPES.

Up in the attic I found them, locked in the cedar chest,
Where the flowered gowns lie folded,
which once were brave as the best;
And, like the queer old jackets and the
waistoast gay with stripes,
They tell of a worn-out fashion—these old waistcoat gay They tell of a work daguerotypes.

Quaint little folding cases fastened with tiny hook.
Seemingly made to tempt one to lift up
the latch and look?
Linings of purple velvet, odd little frames
of gold,
Circling the faded faces brought from the
days of old.

Grandpa and grandma, taken ever so long ago, Grandma's bonnet a marvel, grandpa's collar a show; collar a show:

Mother, a tiny toddler, with rings on her
baby hands,
Painted—lest none should notice—in glittering, glided bands.

Aunts and uncies and cousins, a starcny and stiff array, then blooming, but now so wrinkled and gray. Out through the misty glasses they gase at me, sitting here Opening the quaint old cases with a smile that is half a tear.

The coming summer time I hope to put up more varieties, besides trying my hand on the vegetables. If there is any place where one could live well, it is on the farm, yet we find many people who "live out of the stores instead of their cellars," or do without—mostly do with—out.

Written for the RURAL WORLD.

A friend said to me: "Children have

When we came into possession of Simply Siops Farm, there was, east of the house, so many have outside cellars; so covered with a thritty growth of hasels, sumach and brush of various other kinds, which is the sound of the covered with a thritty growth of hasels, sumach and brush of various other kinds, which is the sound of the covered with a thritty growth of hasels, sumach and brush of various other kinds, which is the part of the part of the covered brother to go through the thicked with a scythe in the fail, and inter, when the rains came, the gude man undertook the job of plowing it. He went over it several times, plowing but the brains came, the gude man undertook the job of plowing it. He went over it seemed ilterally covered with rubble accordance of the covered brother with the place that wavesge stone cuerry. With the pleks and crowbark lego of loose a good many stones too large to lift alone, while the surface stones too large to lift alone, while the surface and the wavesge stone cuerry. With the pleks and crowbark lego of loose a good many stones too large to lift alone, while the surface and the wavesge stone cuerry. With the pleks and crowbark lego of loose a good many stones too large to lift alone, while the surface and the wavesge stone cuerry. With the pleks and crowbark lego of loose a good many stones too large to lift alone, while the surface and the wavesge stone cuerry. With the pleks and crowbark lego of loose a good many stones too large to lift alone, while the surface and the wavesge stone cuerry. With the pleks and crowbark lego of loose a good many stones too large to lift alone, while the surface and the wavesge stone cuerry. With the pleks and crowbark lego of loose a good loose a good many stones too large to lift alone, while the surface and the wavesge stone cuerry. With the pleks and crowbark lego of loose a good loose a good many stones too large to lift alone the large to loose a good loose a good many stones too large to lift alone the large to loose a good many stones to

Written for the RURAL WORLD.
MY SENTIMENTS, TOO.

Written for the RURAL WORLD.

MY SENTIMENTS, TOO.

Wouldn't I like to shake hands with
"Jim's Wife?" I think from reading her
"history" in the RURAL WORLD of February 27, that she is a woman "after my
own heart," and if her 'husband doesn't
"rise up and call her blessed," he ought
to—that's all. All honor to her, and all
women like her all over our broad land,
for there are many of them, not only
here, but in the East and in the far West,
too. How much better for her to ride the
mower, make butter to sell, milk the
cows, etc., than to sit down, fold her
hands and "long," as some of them say
they do, for music, fine furniture and
other things that it would be as impossible for a man in his circumstances to
give her, as it would be for him to give
her the moon, if she would be silly
enough to "long' for it. I have no patience with such "longing."

I can understand the pride and happiness of "Jim's Wife" in everything she
mentions. I've been over the same road.
How well I remember our first drive in
our first buggy, Yes, and I had doe
harder things than ride the mower, too.
But luck is pluck, and if people of limited means take hold as they ought to,
when they are young, and both work with
a will, with the same end in view, they
can't help but succeed. But while you
are helping "Jim," don't go beyond your
strength. It will not pay you to do this.

and the puzzle is still with me—why clamford for dinner, so we spread our trace farmers build rock fences in stead of rail fences—especially the "line" reaches, under the shade of a monarch of fences, between farmer? With great, fair rocke lying everywhere in sight, the rails are still usually laid fair on the ground, to rot out with moisture in a brief while, when they would last much ionger if these rocks were utilized to keep the end off the earth, and to dill in under the bottom rail. Is there any good reason for this?

One of our correspondents was speaked. One of our correspondents was spea

TO CURE A COLD IN ONE DAY Take Laxative Brome Quinter Tablett. (All druggists refund the money if it fails to cure. E. W. Ghove's signature is on each box. Sec.,



Poultry Yard.

REFORM IN POULTRY BREEDING.

We give in this issue two more articles rom defenders of the Standard of Perfection against Mr. Kinder's arraignment. Editor RURAL WORLD: I cannot re-frain from writing my views on the subject of "Reform in Poultry Breeding," too. Being a breeder of pure-bred poultry, I cannot agree with Mr. Kinder, in RURAL WORLD of March 6, where he says, "He has about concluded that the American Standard of Perfection, the modern poultry show and the feather crank are all alike—a serious barrier to real improve-ment in our domestic fowls."

The Standard is the pure-bred poultry breeders' Bible. If it were not for the standard how would we know one breed from another? As it is the Standard describes a perfect bird, which sets a goal for us to reach or breed to. Had we no Standard we would have stock no better than the common fowls in the barnyard flock. It has been my practice to combine beauty and utility in my flock. For example: I had a White Langshan pullet to hatch Il chicks from Il eggs, February 25. This pullet scores 91—was cut three on weight when scored, but would score 64 when up in weight. If she had not

been laying she certainly would not have wanted to set. Was this not beauty and utility combined? The parent stock of this pullet took the prize at the State Poultry Show held this winter at Fayette. and was bred and raised by the writer Most breeders of pure-bred poultry con-sider the poultry show a great educator, and great are the advantages to be de-

rived from them.

Poultry breeders do not attend and exhibit their stock simply to hide their talent in a napkin, but to set it on a hill, that their light might shine abroad. Mr. Kinder says: "Such breeders don't care a continental for practical purposes, just so they can win at the show and have that fact to boast of, that it may bring more dollars into their pockets."

Now, there may be some breeders that
think and act this way, and I would like to steer clear of them if possible. will admit that we do not all, or many of us, at least, keep poultry merely for the pleasure there is in it; most of us like to see the dollar part, and I suspect Mr. K. does, too; but if we can get beauty and utility combined, then why not? There are more breeds of pure-bred poul-try than ever before, which is proof sufficient that the pure breeds are superior to common stock.

MRS. L. MUMPOWER.

ANOTHER DEFENDER. Editor RURAL WORLD: In answer to G. Kinder's article on "Reform in Poultry Breeding," 1 would say that it is self-evident that Mr. Kinder is unable to self-evident that Mr. Kinder is unable to breed up to the present standard, and certainly does not comprehend the Amer-ican Standard. What man that under-stood his a 'o c on this subject would think of discarding an individual of high-est perfection because of some minor de-fect? I am sure no standard calls for it. fect? I am sure no standard calls for it, and no man that half way understands his business would do such thing. I would like to ask Mr. K. if he ever read a Standard. Does he know it makes no such demands? Does he know many of those "feather cranks," even members of the American Poultry Association, have spent the best years of their lives in trying to the best years of their lives in trying to the lives in trying to the lives in trying to have kept individual egg records, breeding the best feed, and in this way have greatly increased the egg yield of nearly every breed? Does he know that others of this same class of "cranks" have spent a lifetime producing ideal market fowls, and that these same "cranks" for the "love of a dollar" have built the standard on united the same "cranks" for the same "cranks" for the same "cranks" in the know in regard to Mr. Kinder's ravings about the Leghorn, does he know how many of these same "cranks" are continually trying, and succeeding, in increasing the egg production of the Leghorn, and that these same "cranks" in years gone by, discovered that to increase their size was to dimining the same of the laws of nature. Does he know that the American class was created and does the head of the laws of nature. Does he know that he could not create a 40-pound hen that he could not create a 40-pound hen that he could not create a 40-pound hen that he know in the egg laying varieties that the standard shape was such as would produce the base was and that in the American class was chas would produce the base was and that the the most eggs, and that in the American class was and that in the American class was created and does the same of the same created and does the sam

would lay an egg every day? Does he know in the egg laying varieties that the standard shape was such as would produce the most eggs, and that in the American and market class the standard shape was such as would look best dressed and eat best when cooked?

Why does he want a Brown Minorca with yellow legs? Why not take a Rock or Wyandotte? Does he know that in the assert markets that scrub here sold ways under the standard traw and a way under the standard traw as an item at the standard that the later that the standard that the later than the later t

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OTES CONCERNING INCUBATION. Editor RURAL WORLD: It is of articular incubation I would speak, of course,

Editor RURAL WORLD: It is or artificial incubation I would speak, of course. For it is one of the important and almost the important question of to-day among questions that are constantly before us for consideration and discussion in that part of the world and its enterprises where poultry topics are the all-absorbing themes of thought and conversation. Viewed from a standgoint of a practical kind, how the old-time theories of earlier incubator manufacturing days have passed away. The world grows vastly wiser as its and with a clearer understanding, every year. We are growing swiftly into an investigating-turn-of-mind sort of people, and take less "for granted" than formerly. Artificial incubation and artificial brooding of chicks have attracted and hold a legitimate share of especial attention. And people everywhere have grown in financial ways, as they have learned to grasp the situation and make the most of it. The business of poultry culture has proven the open sesame to comfort and support for hundreds of people.

But, to return to some of the explode theories of bygone days. For instance, the jarring of eggs when under process of incubation, was a much discussed question, but a comparatively short time ago, and it was repeatedly asserted that eggs should be kept in a room that was stated as a fact that the vibrations of the eggs in trays, and in incubators, caused by the jarring of the floor across which people walked, would every time resul disservoisy. It was said to injure result disservoisy in the said of t

and supposed to be. But it has been skinrully clothed in an apparent, or seeming,
mystery. People have been frequently
deluded by effusive terms applied to the
question, into the belief that the conserving of egg moisture, or as it is termed
"The applying of moisture," is a scientific
principle too deep for the average mind,
and they not the servision and diffusion
and they not the servision and diffusion
and they not the servision and diffusion
that it is all beyond the sen of the understanding of themselves, and they settle
back contentedly, allowing themselves
to be deluded into the belief that some
wonderful master-mind has settled that
question. While the truth of it all is,
as one writer says, "such talk is simply
illusion and confusion, and counts for
nothing at the best."

People who invest in up-to-date machines of to-day, find they have no mixed
problems to solve at all. Our best machines of to-day, find they have no mixed
problems to solve at all. Our best machines of to-day, find they have no mixed
problems to solve at all. Our best machines of to-day, find they have no mixed
problems to solve at all. Our best machines are more often than otherwise,
put into the best rooms of their owners,
and right there, where they are easily
looked after, turn out chicks in most astonishing numbers, and with so little
trouble and loss of peace of mind, that
no account of time given to them is
counted. Women operate one, two or
three machines, as the case may be, and
attend to the housework and home-making right along, and without extra stepaPresently a host of chicks has come to be
taken care of. Then a few more steps
are required than formerly. For the
brooders, women object to keeping in
their own house, and have a shed affair
made to shelter the brooder and chicks
in. But the woman who loves pretty
always rendy to devote the rocusary time
required for keeping her brooder chicks
in comfort. She realizes how fast they
are growing into cash. And she counts
the money she has invested in machi



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W. Hagsadlee, Paris, Mo.

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all yearlings, for sale; also my stud ram for sale or trade for one as good. Address L. G. JONES, Towanda, Ill.



The Pig Pen.

Editor RURAL WORLD: A correspondent in Southern Illinois asks about carrots for hogs. His location is just right for growing ten to fifteen hundred bushel er acre. Carrots are a healthy food for hogs, either raw or cooked. One mess per day, well salted, is much better than medicine. Corn is the hog fattener. A clean pavement is the best place on which

Yes, on the American bottom of Illinois and in St. Louis County, Mo., the land is plenty good enough to produce fifteen ndred bushels of carrots per acre Twelve inches is a reasonably good depth for a seed bed for carrots, but deeper still is better. Buchanan Co., Mo.

HOG PASTURE

In selecting the crops for a hog pasture consider the composition of the plants as you would consider the composition of the grain in a ration. Bear in mind that cer-tain crops are rich in the food nutrient, protein, that is so essential in the animal vatem to build up the frame and muscles and is very necessary in the food of breed-ing stock. Crops of the opposite nature are rich in carbohydrates, the heat and fat forming compounds.

Endeavor to have some of the former to pasture along with latter and the results will be better. Plants belonging to the ormer group, those that are especially protein, are alfalfa, clover, field peas, cow peas, soy beans, vetches and peanuts. Rape, sorghum, the cereals, sweet potatoes and artichokes belong to the opposite group. Aside from being esecially valuable for food, the cow pea group adds greatly to the fertility of the soil while growing on it, and will give paying yields on soil too poor for other crops. While a wheat pasture, or a sorghum pasture perhaps is of great value the results will be much more satisfac-tory if cow peas or some like crop can be pastured at the same time.

be pastured at the same time.

In selecting the crops, due attention should be paid to the point of having a succession of crops that will furnish green feed at all times. Drouth resisting crops should be included for the drouthy time of year. Some crops with proper handling will furnish feed almost the year round, while others are suitable for only one of the seasons, or a part of two. ne of the seasons, or a part of two.

In this list of crops for hog pasture, al-falfa, wheat, rye and oats will not be taken up in full. Where alfalfa can be grown successfully

it has no equal as a pasture crop for hogs, and it furnishes a large amount of feed almost the year round when handled prop-

But about nine men in ten that use it

for that purpose ruin it by too close pasturing and at improper times.

Wheat, oats and rye are standard crops for this purpose, and may be so grown as to furnish green feed for almost the

The peas are ready to pasture when they

start to bloom. The seed costs from \$1.50 to \$2 per bushel, which will keep many from growing them. It is well to see if more suitable crop is not available, but field peas are worthy of a trial in this country. The yield of oats and peas the past season on the station farm was 15 ons per acre. Fair results have been obtained from fall seeding on the station

The rape plant makes the best of spring pasture. It is a plant that rurnishes, ander fairly favorable conditions, a large mount of green feed in a short time from planting. The color and texture of the leaves resemble cabbage, but it grows two or three feet tall and has no value only in the green stage. It is grown over a wide territory and under varying condi-tions, but adapted to moist, cool weather and a good, rich soil. For a time it was hought suited only to the Northern states and Canada, but gradually it is working South and has given very favorable re-



THE HAYNER DISTILLING CO., 5-324 West Fifth St., DAYTON, OHIO



sults in Oklahoma and should be tried by all hog and sheep raisers.

The following results were obtained on

A the Oklahoma station farm the past sea

Rape, drilled with oats

Rape, drilled, rows 30 inches.. 23.5 Rape, drilled, rows 6 inches... 11.

March and the yields determined June I. The plots were on well manured land. For this country the seeding should be made early in March. The hot dry weather of August has stopped the growth here, and the June seeding for fall pasture as advised by some will give very uncertain results as will the seeding in corn just before the last cultivation. Such method

may give fair results at times of much rain fall. It is a plant that stands a great deal of cold and frost. Seedings made on the station farm last fall have lived through the winter and the plants are making an early spring start. The fall growth was rather small. Both broadcasting and drilling for cultivation, are practiced. For this country, if much dependence is put upon the crop, drilling in rows to admit of cultivation is recommended. Planted in this way it will stand the drouth much better and if pastured and cultivated properly, the period of growth may be greatly extended, and much more feed obtained. A good rich oil is more essential where broadcasting s employed.

For broadcasting, three to five pound of seed per acre should be used. For drilling in rows, 30 inches apart, one to two pounds should suffice. The poorer the soil and the more unfavorable the conditions,

n 6 to 10 weeks from seeding, but pastur ng may commence as soon as the plant are firmly rooted. Sheep or hogs do not like the plants at first, but by limiting their other feed, they will eat it, and when they have acquired a taste for it they eat it greedily. Care must be taken in turning sheep on it to avoid bloating in turning sheep on it to avoid bloating. There will be several successive growths if the plants are not pastured or cut closer than four inches from the ground The seed costs about 10 cents per pound in small quantities. The Dwarf Essen variety should be used.

Rape and field peas, and rape and oats nake fair mixtures for seedi

The "Never Roo:" Hog Tamers are the

GOOD ADVICE. Don't keep an animal if you can't keep it well. The little lumps of hide and bones sometimes seen on farms and called pigs are of no profit to anybody, says "Swine whole year. But many times they are over pastured and pastured too late when the crop is to be left for grain. In both of these cases other crops should be furnished to prevent the over pasturing and at improper times.

In addition to the above named crops

sometimes seen on farms and called pigs are of no profit to anybody, says "Swine see how good an animal you can make of it. It is too common practice to have named to properly cared for. In such case it would be far better to dispose of all the surphip before the common profit of the profit of the common profit of the common practice to have a pig try and see how good an animal you can make of the profit of the common practice to have a pig try and see how good an animal you can make of the profit of the profit to anybody, says "Swine are of no profit to anybody says hese cases other crossibles cases other crossibles cases other crossibles cases other crossibles cases of the cover pastures at improper times.

In addition to the above named crops better to dispose of another than it you cannot should be mentioned field peas, rape and vetches.

And pea belongs to the cow peasible cover c hat may be hould be mentioned field peace, betches.

The field pea belongs to the cow peas class and is suitable to a cool, moist climate and will withstand a hard frost, so should be seeded early in March. Broadbauld be seeded early

DRIED BREWERS' GRAINS FOR HOGS.

Chas. Hill wishes to know if dried brewers' grains at \$16.50 per ton are as cheap for feeding pigs as corn meal at \$18 per

The dried brewers' grains are much richer in protein and poorer in carbohy-drates than corn meal. It would be best then to buy both dried brewers' grains and corn meal and feed about one-fourth dried brewers' grains and three-fourths corn meal to his hogs. Dried brewers' grains contain considerable more crude fiber than does corn and crude fiber i not a useful substance with pigs. Still, by feeding as recommended he will get better results than supplying either one alone. W. H. HENRY.

PIG PEN POINTERS.

S. G. RICHARDS, Sturgeon, Mo., asks us to say to our readers that he has sold everything he has to sell in Duroc-Jersey

W. H. KER of Prairie Du Rocher, Ill., w. H. KER of Frairie Bu Roches, Ill., reports his Berkshires in good shape, and trade good. He has on hand to date, 65 head of spring pigs. If you want good Berkshire pigs, Mr. Ker has them, and will try to please you. The earlier you place your orders with him the better pigs you can get. Note what he says in his advertisement and govern yourself ac-

HOGS WITH MANGE.—We are glad to get the RURAL WORLD and always en-

den, Neb., who advertises White Mam-moth artichokes elsewhere in this issue, says: "I am glad to say you certain have a wide-awake lot of subscribers, judging by the number of inquiries I have received about artichokes, I feel I have received about artichokes, I feel I am safe in saying after giving artichokes a trial for ten years, that there is no other root crop grown that can be grown and fed to hogs so cheaply. As it does not hurt them to freese in the ground, their season for use is from October to May, thus furnishing hogs a succulent food at the season when they are confined to dry food."

The Oklahoma Experiment Station says:

The Okianoma mayer as a most excellent crop to turnish fail and winter pasture for hogs. Under proper treatment 400 to 300 bushels of tubers per acre may be counted on. Plow the ground as you would for potatoes; plant in April in rows three featapart with the hills fourteen to eighteen inches apart in the row, and cultivate as



MACHINE SHEARING.

sheep by the laborious and tedious use of the hand shears, it is not strange that we marvel when told that now a man with the assistance of a boy can shear 300 sheep in a day. Yet that is what Mr. R. M. Marquis has been able to do, using one of the shearing machines of the Chi-cago Flexible Shaft Co. In fact, his best record and the best of the world, is 880

MACHINE SHEARING.

Recalling the days when we sheared theep by the laborious and tedious use ing the fleece from a sheep. The picture is one of a series of 12 that is presented in the catalog issued by the Chicago Flex-ible Shaft Co., showing the operation from beginning to end. By these pic-tures one gets a correct idea of how to hold a sheep for machine shearing. Ac companying the pictures are explicit di-

record and the best of the world, is sow wethers in 14 hours 46 minutes, the amount of wool taken off in the time being 2,650 pounds. This feat was ac-complished last June on Bower Bros.' Our readers should send to the Chicago ranch at Martinsdale, Mont. Mr. Mar-Fiexible Shaft Co., Chicago, Ill., for a luis, by the way, is a Caldwell County, copy of their catalog.

held here on February 27, was a success Prices from \$10 to \$33 for pigs. The Berk-shire sale of Pollard & McCue, which we held at Jeff City on March 6, was poorly attended on account of bad weather, and

a lack of proper advertising.

They had a splendid lot of hogs that were good bargains at prices ranging from \$10 to \$50. The average was about \$55. GEO. W. M'INTOSH, Monett, Mo., writes: I wish to renew my advertise-ment and enclose herewith P. O. order for having an ad. in the RURAL WORLD.

I could not supply all of my customers the past season, but have enlarged my herd of Berkshires and have an extra lot of fine pigs on hand now and am booking orders for them from several different states. The following letter is from one of my customers, the county clerk of

Barry County:
G. W. McIntosh, Esq., Monett, Mo.
Dear Sir: The Berkshire pig that you sent me last June is a fine looking fellow now, and he has proven himself an excellent breeder. His pigs are perfect pictures. I want two or three sows. Write me what you have. M. C. MESSER.

If you feed and water stock, it will pay
you to write O. K. HARRY STEEL
WORKS, St. Louis, for their Illustrated
Catalog of Feed Cooke Hog Troughs,
Tanks, etc.

The Shepherd.

CLATION. CIATION.

Norman J. Colman, President, 1214 Chemical Building, St. Louis, Mo.

L. E. Shattuck, Secretary, Stanberry,

Editor RURAL WORLD: Sentiment ceases to enter into the question when the welfare of a great industry is threatened. This winter, as we have had little wet weather, sheep men felt safe in allowing their stock the range of the blue grass pastures at night, and the number killed by dogs is appalling. The damage was not done by half-starved curs, either; as over as early in spring as possible. in several cases it was traced directly to in good working order harrow lightly and pampered household pets that never were hungry in their useless lives. In one case the dogs, after killing a dozen fine ewes, turned their attention to a couple thoroughly so that they are all well covered to the couple of the of calves and worried them to death.

some of your correspondents inform me through your splendid paper as to the proper time to castrate, dock, dip and give the gasoline remedy to lambs? And will a buck that is one of triplets, be more prolific than a single lamb?

Bond Co., Ill. DON C. GRAFF.

you would corn. In this country the pasture is available the winter through.

COL. R. L. HARRIMAN writes: The Rogers & Cully sale of Poland-Chinas, held here on February 27, was a success. would make it disagreeable to the oper ator. Many United States shepherds prac-tice clipping off the scrotum and its con-tents with the shears when the lambs are not more than two weeks old, and claim that it is perfectly safe. The general practice of English shepherds is to cut off the end of the scrotum and draw the testicles, one at a time, casings and all with the teeth or with a pair of forceps, holding in either case one hand tightly upon the lamb's belly while drawing them out. There is very little risk attending the operation at this age, and it is very important in the case of grade lambs intended for the butcher that docking and castration be attended to withou fail, as ram lambs are a nuisance in the fall, and have to be sold at a much lower

Dipping should be done soon after the flock has been sheared, choosing a warm day for the operation. If the dipping is for the purpose of killing the ticks, there should be a second dipping after the first. For scab there should be eight or ten days' intervening between the two

Mothers will find "Mrs. Winslow's Soothing Syrup" the Best Remeay for Children Teething. PEAS FOR SHEEP.

There is no better food for sheep than peas, and when they can be raised in conjunction with oats they make a profit able crop. I mix them with half oats, and when sowed they yield nearly as many to the acre as if sowed alone, says James Ridgeway in the "Michigan Farmor." There is a decided advantage in sowing with oats, because the oat stalks hold the peas upright so they can be easily cut with a mower. A variety of oats for this work should be selected that naturally produces a strong, stiff straw. Two bushels of the small Canada field per to one bushel of oats makes about the right combination. On good land this seed mixture will do well and produce an abundant crop that will make most excellent food for sheep. Corn stubble land is the best for this work if one has it, and it will always prove easily work-able for the cats and peas. If sod ground is used it should be fall plowed, or turned

ered. Then a week later sow one bush Walnut Valley Farm Herd
Poland China Swine. Biack U. S. and Tecumseh
Poland China Swine. Biack U. S. and Tecumseh
Poland China Swine. Biack Langshap
Program of party Cattle for sale. Black Langshap
South and has given very favorable reBigs #1.9 for 15. Ernest W. Wallen. Monett, Mo.

VIVION & ALEXANDER,
PULTON. MO.

Breeders of the best strains of Poland-China
Regs #1.9 for 15. Ernest W. Wallen. Monett, Mo.

Breeders of the best strains of Poland-China
Regs #1.9 for 15. Ernest W. Wallen. Monett, Mo.

Breeders of the best strains of Poland-China
Regs #1.9 for 15. Ernest W. Wallen. Monett, Mo.

Breeders of the best strains of Poland-China
Regs. Engineerd Jersey estitle and Phymothis
Regs. Engineer Jersey estitle and Regs. Engineer Jersey estitle and Phymothis
Regs. Engineer Jersey estitle and Regs. Engineer Jer be planted. If put in together and covered with the same amount of soil one crop or the other will prove a failure. The peas do well when planted deep and the oats require a surface planting, and the growth of the oats will not interfere with the peas coming up, while the two WHEN TO CASTRATE, DOCK AND DIP

Editor RURAL WORLD: Will you or some of your correspondents inform me through your splendid paper as to the proper time to castrate, dock, dip and give the gasoline remedy to lambs? And will add the spronger to the grasoline remedy to lambs? And will add the spronger to the specific to the grasoline remedy to lambs? And will add the spronger to the specific to the soil when the harrowing is finished, for this leaves the ground in such good con-dition for harvesting. Soon after the HCGS WITH MANGE.—We are glad to get the RURAL WORLD and always enjoy Mr. Clement's Horse Gossip.

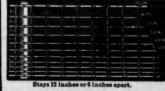
Will some one give me a simple remedy for mange on hogs? GEO M. GIBSON.

Oklahoma.

Send to Zenner Disinfectant Co., Detroit, Mich., for a copy of "Zenoleum to the tail as should be docked about two inches from the rump. This may be done with a sharp knife, cutting upwards from the lower side of the tail at a joint, as the lamb stands, or the lamb may be held but not enough so as to lose their leaves, and note what is said about Zenoleum as a remedy for skin diseases of hogs. Zenoleum is advertised in another column.

ARTICHOKES.—Geo. A. Arnold, Hayden, Neb., who advertises White Mammoth artichokes elsewhere in this issue, ways: "I am glad to say you certainly

> LOWEST HIGHEST



GREATEST Durability. **AMERICAN**

FIELD AND HOG FENCE. Now is the time to put it up. It will stay up a lifetime. All best steel wires heavily gaivanized-fully guaranteed. Resists animals, resists rust, provides for expansion and contraction. Sold by agents everywhere. If no agent in your town write to the makers.

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DOLLARS IN YOUR POCKET

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BRAINS COUNT.

oppear, and no tette name of the work was a series of the We made that there are the series of the s

The Three Million Acre

FARWELL RANCH

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The land is largely chocolate or black sandy loam, deep, rich, capable of producing forage crops in great abundance. It is thickly coated with buffalo, mesquite, grama, sedge and other choice grasses. Rainfall ample for production of forage crops, grasses and fruits. Admirably adapted for Grapes, Pears, Peaches, Apples, Plums, Melons, etc. An inexhaustible supply and excellent quality of water is procurable at an average depth of 125 feet.

The altitude varies from 2300 feet at the south to about 4700 at the north. The temperature is equable and the climate unexcelled for healthfulness. This is the best cattle and stock breeding country in the world. Panhandle cattle are of very superior quality, a carload of steers bred on this Ranch having been reserve number for the grand champion carload of fat steers at the International Live Stock Exposition in Chicago, December, 1900. The stock subsists on the pastures the entire year, finding very nutritious food in the cured native grasses. This is an unprecedented opportunity for those desiring to engage in the stock farming business or for investors willing to hold for appreciating values. The small ranchmen in the Panhandle have made more in recent years for the capital and energy invested than the farmers in any section of our country.

The ft. Worth & Denver Cliff By, traverses the north end of this land, the Precs Valley and Northeastern By. (part of the Santa Fe, system) the south end, and the Chicago, Bock Island and Pacific By. is construering a line from Liberal, Kas. to El Paso, Texas, which will soon traverse the middle of it.

Title perfect. Will be sold in solid blocks to suit purchaser for cash or very liberal time payment.

To inspect lands call on A. G. Boyce at Channing, a station on the Ft. Worth & Denver City Ry. in Hartley Co., Texas, and for full particulars write him or Wm. Boyce, agent, Amarillo, Texas; or Geo. Findlay, agent, 148 Market Street, Chicago, Ill.

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Cedar Lawn, E. H. Rodgers, Proprietor, Proprietor, Proprietor, Breeder of registers 1 Shryphire Sheep, Poland China Hogs and Shorthorn Cattle. Also Mammoth Broase Turkeys and Sarred Rock Chickens.

E. H. Rodgers,

SUNNYSIDE HERD OF PRIZE WINNING UP-TO-DATE BERKSHIRES. Six boars ready for service for \$23.00 each, that will make show boars; three of them sired by Lord Premier 50001, out of a show sow. Ten nice young sows bred to farrow in June; we will sell for \$55.00 to \$55.00 each, guaranteed in pig. Correspondence solicited, impaction invited.



Chicago Sheep Shearing Machine spor Model Stewart's Pat. Price \$15

Price \$15
Guaranteed to shear any kind of wool that grows.
All gears cut from the solid metal and hard-ened. BOOK ON SHEARING just published. Finely slustrated, with valuable hints for fast and easy shearing y R. M. Marquis, champion of the world, will be sent free to any sheep owner on application. Address CHICAGO FLEXIBLE SHAPT CO.

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on kinds, culture, yield (often 1,000 to.p. a.),
with prices and fir. rites to all points. Single be.
31. Martills Bock Farras, Baz 83, Baville, Ill.

AND SOCIETY Colonel Wentworth Higginson Writes of the social life of the young man of the mid-century.

Mr. Bartlett

Of Hibbard, Spencer & Bartlett, tells of the con-ditions under which the young man of the period served his business ap-prenticeship, and com-pares the old times and opportunities with the new.

Many other just as interesting articles regu-larly appear in

THE SATURDAY EUENING POST OF PHILADELPHIA

lendid weekly magazine, handsomely d and illustrated. Founded 1728 by Franklin, and continuously published tyears; now has a circulation of over 0 copies weekly and increasing at the f a thousand new subscribers a day.

We will send the Post for Three Months (15 weeks) to any address on receipt of only 25c; also two interesting books: "The Young Man and the World" and "The Making of a Morehant." They contain famous articles taken from recent issues of the Fock writen by such men as ex. Presidence of the Post of the Post

The Markets

WHEAT—Cash Market—Sales del. of No. 2 red at 75c this and 754c E. side; No. 3 red at 75c to 74c; No. 4 at 65c to 71c. Hard in fair milling demand, No. 2 selling at 72c and choice No. 3 at 714c.
CORN—Cash Market—Demand limited, but so was the supply on sale. On trk. del.; No. 2 sold at 40c, mainly at 40%c; No. 3 at 40c; No. 3 at 40c; No. 3 at 40c; No. 3 white at 40%c.

OATS—Cash Market—By sample, No. 2
OATS—Cash Market—By sample, No. 2
at Zic; No. 3 at 28½c; No. Northern at Zic;
No. 2 white at 28½c; No. 3 white at 28½
28½c; No. 4 white at 27½GZZ½.
MILLFEED—Mills about all sold close
up and blds of 78c for skd. bran E. trk.
prompt, or March shipment fail to purchase, but for April shipment shippers
demand lower prices and the best
bld 7fc. At mill bran sells at 78@80c for
bran and 80c for ships.

The s	following tal	bles show the d cash grains:	range of
		Range Monday.	Clesed Monday.
Wheat	_		-
May	741/4@1/4	7414@14@75%	74 a.
July	731/4	73%,@73	731/a a
Corn-			
May	401/a a.	40 / @40%@%	401/4@5%
July	401/6 a.	40%@40%@41	40%@41
Onta-			20.10.03.22
May	96	26140	9614
July	241/4	@	241/4 b

Cash wheat, corn and oats. Wheat— Range Last Yr. Saturday. No. 2 red11½@12½, 14¼,@15½, 75 @15½ No. 3 red68½@10, 72½,@13½, 73 @17½ No. 4 winter.00 @67½, 71¼,@22 72 @72½, No. 3 hard.64½@63½, 70¾,@27 72 @72½, No. 3 hard.64½@63½, 70¾,@27 72 @72½, No. 3 hard.64½@63½, 70¾,@11¼, 71 @71½ Corn— No. 2			24% D
Wheat— Range Last Yr. Saturday. Range Monday. No. 2 red71½@72½ 74½.075½ 75 .075½ No. 3 red68½@70 72½.073½ 73 .074 No. 4 winter.60 667½ 71½.0273½ 73 .074 No. 2 hard. 64½.065½ 71½.072 72 .072½ 72½ No. 3 hard. 62½.065½ 71½.071½ 71½.071½ 71 Corn— No. 2 371½.073 39½.040 40.040½ No. 3 371½.06 39½.00 40½.00½ 40½.00 No. 2 white.35 283½ 40½.040½ 40½.00 40½.00 No. 3 white.37½.00 40½.00 40½.00 40½.00 40½.00	Cash wheat, corn and	onts.	
Range Last Yr. Saturday. Monday. No. 2 red 7114@72% 74%@75% 75 @75% No. 3 red 68%@70 7224@73% 73 @774 No. 4 winter.69 @67% 713@72 72 @772% No. 2 hard 64%@65% 71%@72 72 @772% No. 3 hard 62%@63% 70%@71% 71 @71% No. 2 hard 62%@73% 93%@40 40 @40% No. 3 white.37%@ 39%@ 40 40%@0. 39%@40 40%@0. 30 white.37%@ 40%@ 40%@ 40%@	Wheat-	w Creating	
Last Yr. Saturday. Monday. Monday. Ro. 2 red71½-672½ (14½-67½-1½ 675½-1½-1½ 675½-1½-1½-1½-1½-1½-1½-1½-1½-1½-1½-1½-1½-1½		Danma	Thomas
No. 2 red71\(\frac{1}{6}\)(272\)\(\frac{2}{3}\)\(\frac{4}{3}\)\(\frac{4}{3}\)\(\frac{1}{5}\)\(\frac{1}{5}\)\(\frac{1}{6}\)			
No. 3 red68¼@70 72½@73½ 73 @714 No. 4 winter.60 @67½ 71¾@72 72 @72½ No. 2 hard. 64½@65½ 71¾@72 72 @72½ No. 3 hard. 62¼@65½ 70¾@71½ 71 @71½ Corn— No. 237¼@37¾ 39¾@40 40 @04½ No. 3 winte.37¼@3 93¾@40 40 %00½ No. 2 white.33 @33¾ 40¼@40½ 40¼ No. 3 white.37½@ 40¼@0		Saturday.	Monday.
No. 3 red68½@70 72½@73½ 73 @714 No. 4 winter.60 @67½ 71½@72 72 @72½ No. 2 hard64½@65½ 71½@72 72 @72½ No. 3 hard62½@65½ 70½@71½ 71 @71½ Corn— No. 2371½@37½ 39½@40 40 @00½ No. 3371½@37½ 39½@40 40 @00½ No. 2 white.38 @38½ 40½@40½ 40½ 40½ No. 3 white.371½@ 40½@ 40½@ Oats— Oats— Oats—	No. 2 red711/20721/4	74% @75%	75 @7534
No. 4 winter.80 @6714 114@72 72 @7234 No. 2 hard. 644@6554 7143@72 72 @7234 No. 3 hard. 624@6634 704@7114 71 @7114 Corn— No. 23714@374 394@40 40 @4054 No. 33714@374 394@40 40 @4054 No. 2 white.38 @3834 4054@4054 4054 4054 No. 3 white.3714@ 4054@0 4054@0	No. 3 red681/4@70	721/4 @ 731/4	
No. 2 hard. 64446654 7134672 72 07244 No. 3 hard. 62446634 70466714 71 07146 Corn- No. 2	No. 4 winter.60 @6714		
No. 3 hard. 62½@63½ 70½@71½ 71 @71½ Corn— No. 237½@37½ 39½@40 40 @40½ No. 337½@37½ 39½@0. 39½@00 No. 2 white.38 @35¾ 40½@40½ 40½ 40½ No. 3 white.37½@			
Corn— No. 23714@3714, 394@40 40 @4014, No. 33714@0394@0394@00 No. 2 white.33 @3814, 4014@4014, 4014, 4014, No. 3 white.3714@	No. 3 hard . 6214@6314		
No. 3	Corn-		
No. 3	No. 2374@37%	39% @40	40 @4034
No. 2 white 38 @38% 40% 40% 40% 40% No. 3 white 37% 40% 40% 40%			
No. 3 white 37½@ 40¼@ 40¼@			401/4 408/4
Oats-			401/100
			To 18 48
		961460	969/ @961/
No. 3 9414@ 9614@ 9614@9614			2074 (2/2072

In every town and village may be had,

drawn. All poor stock, including discolored, thin, scrawny, etc., nominal.

APPLES—Quote: Baldwin at \$365.50 for No. 1 and fancy; 2.2562.70 for No. 2 (damaged and off stock less); mixed varieties at \$1.062.30 for No. 1; russet at \$365.40; fancy kings at \$4, and spy at \$3.50; Den Davis at \$4 to \$3.50.

POTATOES—Northern stock on trk.: Wisconsin and Minnesota—Burbank at \$3636 for common to fair, to \$7638c for choice bright; white mixed at \$3636c.

ONIONS—Quote sound red globe at \$1.50.

Gl. 30 per bu.—top rate for fancy; yellow worth about \$1.2961.25 per bu.; white at \$1.49. 80f, skinned, small and inferior nominally less.

SWEET POTATOES—Steady. Quote home-grown Bermuda at \$56; yellow at \$40c, and red nansemond at 50600 per bu. loose, and at \$1.50 per bbl. for Bermuda and \$1.75 for nansemond at 50600 per su bu. loose, and at \$1.50 per bbl. for Bermuda and \$1.75 for nansemond on orders.

GRASS SEEDS (per 100 pounds)—Prices unchanged, Timothy at \$2.50 to \$3.7564 for average receipts—prime worth more and inferior less; redtop at from 50 to \$3, millet at 75c641; Hungarian at 70690c; clover at from \$9.50 to \$10.50—poor lots much less. About 60 sks. clover offered, but only 16 sks. reported sold at \$566 for very weedy, to \$3.7669.90 for fair; also ½ car millet at \$75c.

SORGHUM-CANE SEED—Latest sale at \$1.074 per 100 pounds on track.

FEATHERS—In demand; steady, Prime L. G. in small sks. \$6c, in large sks. \$40c; gray, 37c in small, 35c in large sks. \$40c; gray, 37c in small, 35c in large sks. \$40c; gray, 37c in small, 35c in large sks. \$40c; gray, 37c in small, 35c in large sks. \$40c; gray, 37c in small, 55c in large sks. \$40c; gray, 37c in small, 55c in large sks. \$40c; gray, 37c in small, 55c in large sks. \$40c; gray, 37c in small, 55c in large sks. \$40c; gray, 37c in small, 55c in large sks. \$40c; gray, 37c in small, 55c in large sks. \$40c; gray, 37c in small, 55c in large sks. \$40c; gray, 37c in small, 55c in large sks. \$40c; gray, 37c in small, 55c in large sks. \$40c; gray, 37c in small, 55c in large sks. \$40c; g

prime.
SHEEP PELTS—Full-wool pelts at 50c to 80c, according to amount of wool thereon; lamb at 56650c. Southern at 25640c; shearlings at 25655c; dry stock, fallen, etc. 768c per lb.
ROOTS—Ginseng at from \$3.50 for small

on, name at 20035c; dry stock, fallen, etc. 703c per ib.

ROOTS—Ginseng at from \$3.50 for small to 14 for large; lady slipper at 7c; seneca at 38c; pink at 14c; golden seal at 45c; May apple at 2½c; snake at 23c; black at 3c; angelica at 3½c; wahoo—bark of root 8c; bark of tree 2½c; blood 2½c; bluefag 3c; skull cap leaves 5c; sassafras bark 4c; wild ginger 4c.

STOCK PEAS—Whippoorwill quotable per bu. at from \$1.20 for fair to \$1.35@1.40 for prime. Other varieties nominal.

DRIED FRUIT—We quote: Apples Evaporated—Rings at 3½ to 4c; quarters at 3c to 4c, chops at ½@½c, peelings at 4½c; sun-dried—quarters at 3@3½c for good—inferior less. Peaches—Fancy evaporated unpeeled halves at 3c, and sun-dried at 1c to 1½c per pound. ings at 7gc; surd-ried-quarters at 2gwylc for good-inferior less. Feaches-Fancy evaporated unpeeled halves at 3c, and sun-dried at 1c to 15c per poulcked WHITE at Jobbin way from store at 11,892 per bu; screened at 11,892 les per bu. Country at 160.50. Lima beans at 8266666 per pound.

bu. Country at \$1@1.50. Lima beans at \$6\text{\$66\text{\$66\text{\$1

LIVE STOCK.

SPRAYING FRUIT TREES.

The question of spraying fruit trees to prevent the depredations of insect pests and fungus diseases is no longer an ex-periment, but a necessity.



AN ILLINOIS LETTER.

Editor RURAL WORLD: Your valuable paper has been a regular visitor at our house but a short time, and in that period I have gleaned much satisfaction and useful information from the same, the letters being very interesting.

A great deal of timothy hay is being

roduced in this section, which is paying the farmers nicely at present. They re-ceive from \$ to \$10 per ton, according the farmers nicely at present. They re-ceive from \$\frac{1}{8}\$ to \$10 per ton, according to quality. Most farmers have improved machinery for the handling of hay crop, and careful farmers estimate the cost of cutting, stacking, baling and hauling to market at \$2.50 per ton. It is very poor land that will not make over one ton per core to say nothing of the pasture after. acre, to say nothing of the pasture after the hay is removed. Corn makes a fair crop generally, but

One thing most certain, a great many to \$5.30 per farms are being killed for want of retation of crops. Fruits of most every kind are adapted to this latitude and do well here.

A good acreage of oats will be sown. Some have tried "Lasy Man's Oats," or freezing them in, but the plan won't work inless conditions are most favorable.

Getting the summer's wood, repairing ences and getting ready for spring and summer work are the order of the day. Stock as a general thing has wintered in good shape. Hogs are scarce. Good horses and mules are scarce and bringing good prices. HENRY HINTON. Shelby Co., Ill.

THE DANGEROUS PAINT BURNER.

It seems that the house was one of those old ones, built about 30 years ago, when all the painters round here were using second grade lead (zinc white and barytes) for priming. Now, I never saw house that had been painted with that stuff which would not peel and crack down to the bare wood, while every here and there some of the paint will cling to the wood like grim death, and if you want to make an even passably decent job you must burn off the paint.—The Veteran Painter, March, 1899.

At the recent convention of the Society of Master House Painters and Decorators of Massachusetts Mr. W. J. Edwards of Cambridge brought out the fact that the insurance companies look upon the gaso-line torch as exceedingly dangerous and stated that if a fire occurs as the result of its use the insurance is likely to be invalidated. The Underwriters' Associa-Milly Fight and the state of th tion of New England have adopted a new clause, which will be attached to all pol-cies in the future, forbidding the use of this dangerous method of removing paint,

of experience on the farm something of farmers' needs.

MRS. M. L. SINGLETON, proprietor Elmhurst Poultry Yards, Wellsville, Mo., writes: "It seems that I made a big mistake in copy of ad I sent you, which I ask you to kindly correct. My fowls of all kinds are doing well and I was never in a better position to furnish my customers with eggs that I know will produce high-class stock. In Langshans I have two yards that I consider Al. In yard No. 1 are pullets scoring 94 to 95%, headed by a cock scoring 95%. This cock is a grand-son of fowls imported by Kirby & Smith and he is a grand bird. Yard No. 2 hens score 94 to 95%, headed by a 95%, point cockerel. A letter received from Judge Wale several weeks after he scored my fowls says: 'I have seen no cockerels this winter that I like as well as your best one.' My outside flock consists of hens and pullets, many of them scoring from 95 to 94, mated to 95% point cockerels. Eggs from this flock I sell at 55 per 100, 39 per 200. I also have two grand yards of turkeys, 10 females in each yard. These females score from 95% to 96% and weigh from 19 to 22 pounds. The first yard is headed by a 40 pound yearling tom, score 96%, second yard headed by a 34 pound young tom, score 96%. Turkeys are beginning to lay and I am ready to fill al orders with promptness and dispatch."

THE FARM WATER SUPPLY.—On most farms there is a supply of water sufficient to save the garden and even field crops in critical times of drouth if it can be gotten to the proper place at the proper time. The Rife Hydraulic Engine is designed for just that purpose. It runs for years without expense or attention, elevating water any height or distance. Operates successfully under two or more feet of fall and is fully guaranteed. Especially desirable for farms and country residences. Send for catalog to Rife Engine Co., 126 Liberty street, New York.

NOTES FROM AN OHIO FARM.

Editor RURAL WORLD: This is March 9, and there is very little farm work done yet. A few have made tobacco beds and nearly all the clover seed is sown, a little plowing is done on south hillsides. Our winter opened November 11 and since that time the ground has not een free from frost 48 hours at a time January 25 we had a fall of two in

Corn makes a fair crop generally, but last season rain injured a great deal of corn on low, flat lands. But on the higher land corn was good. Some of the farmers in this section are experimenting with cow peas and sorghum, but can't say how they will do as a paying crop. this winter and the crop of pigs is immense. There is satisfaction in growing pigs where the hog market ranges from \$6 to \$5.30 per cwt., and \$6 hogs are predicted

RAIN.—Yesterday— and day before, March 9-10, it rained a full inch of water with heavy thunder and lightning, and some wind. We needed this rain and the ground is in much better shape for it.

A very few days of sun and wind will put
the land in order for spring seeding.

Ohio, March 11, 1991. C. D. LYON.

QUALITY AND PRICE.

QUALITY AND PRICE.

One of the first things the successful business farmer learns is that it does not pay to buy cheap and shoedy goods—'cheap and anasty' someone has called them. We believe that this is especially true of vehicles. It takes good material good material costs money. It's see a way with the work that goes into it; it cannot be built for nothing. So when we see a vehicle advertised at an extremely low price we are apt to think that it is dear at any price, and so it is, for a shody vehicle, besides, never looking well, costs more than a good one for repairs, to say nothing of the danger of breaking your neck every time you get into it. But, on the other hand, a man need not pay a fancy price to get a really good job, especially when he can buy a first-class vehicle from the maker direct. Take the famous Spiit Hickory vehicles, for example. Now that the manufacturers of these well known goods have decided to



discard jobbers and dealers and sell direct to customers, you can buy a vehicle which you know is right all the way through, a vehicle with a written warranty behind it, shipped to you on approval, for one-thrid less than dealers ask. There is not a better line of vehicles in the world than the "Split Hickory." Not only are they substantially made, but they have a style and finished appearance found in few makes, and a dozen little conveniences covered by patents, which make them the leaders wherever introduced.

en little conveniences covered by patents, which make them the leaders wherever introduced.

The above illustration shows their Extension Top, Straight Sill Surrey No. 475, a very handsome and roomy vehicle with long distance, dust proof axies, spring backs and spring cushions, trimmed in either genuine leather or all-wool broadcioth, with silver lamps, double fenders and fine finish throughout. It is only one of their many popular styles of buggles and carriages. They ship goods everywhere on approval and will paint, trim and finish to suit the customer's individual taste.

The new catalog showing Split Hickory styles is a most valuable book on vehicles, containing many things every owner of a carriage should know, whether he buys a Split Hickory or not. A copy will be sent to any interested reader who addresses the Ohio Carriage Company, 12 West Broad St., Columbus, O.

THE STUDEBAKER BROS. MFG. CO.

West Broad St., Columbus, O.

THE STUDEBAKER BROS, MFG. CO.
of South Bend, Ind., have an advertisement in this issue of our paper, and we
wish every subscriber of the state of the state
why Studebaker Bros, put and it. That is
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goods they are manufacturing and it.
goods they are manufacturing and they
have to say or what they have to offer
unless you read their announcement.
We scarcely need tell you who they are.
You have seen the name "Studebaker" on
wasgons so frequently that you must know
that they are the largest wagon and
vehicle manufacturers in the entire world.
You must also know that their goods
have a worldwide reputation for honesty
in material, construction and wearier,
ability. Write them for catalog and other printed matter. You will not only
thereby help us and them, but you will
also help yourself.

Don't Sell Your Farm

But Buya Nichols & Shepard Threshing Outfit and Double Your Income.

Within a radius of five miles of you, there are 418 farms averaging 130 across each. Each farm will produce an average of ten acres of wheat yearly. At 15 bushels per acre this would equal 150 bushels to the farm, ore 62,700 bushels. Each farm will produce an average of 20 acres of oats. At 25 bushels per acre, this woulded the subshels of the farm, ore 20,000 bushels. The threshing of the results at 25 per bushel would amount to 35,138. A great of 35,016 for threshing of the oats at 145 per bushel would amount to 35,138. A great of 35,016 for threshing of the oats at 145 per bushel would amount to 35,138. A great of 35,016 for threshing of the oats at 145 per bushel would amount to 35,138. A great of 35,016 for threshing wheat and oats alone, to say nothing of 179, barley, buckwheat, etc., and the hulling of clover. Certainly a handsome income in addition to the proceed of your f.rm. We know of no reason why you may not enjoy a fair portion of it if you will. Then, too, you may use the Engine in combination with a corn husker and fodder shredder after the threshing season is over. Or you can attach it to a saw mill. Or you could buy a power grinder and do custom grinding for the entire neighborhood. Oh, there are many ways in which you could make money out of such an investment. Write us. Look into the matter before another season rolls around.

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Just About Spokes.

The weakest point in a spoke is at the shoulder, just where the spoke enters the hub. This is specially true of the old style square tenon spoke. We don't have any weak point in our

spoke. We don't have any weak point in our spoke for we use the Famous Studebaker Slope-Shoulder Spokes which are heavy and doubly strong at the point of greatest strain. The cut we show herewith explains this better than words. The spoke marked with an X is the common square shoulder spoke used on there wagons. All the others are the slope shoulder spokes used on Studebaker Wagons only. You can see at a glance why "Studebaker" spokes do not break at the shoulder and why "Studebaker" wheels outwear all others. Then, too, our spokes are made of best selected Indiana white oak, thoroughly seasoned in the shade. They are driven into the hubs thoroughly glued, with a powerful driver. The effect is to make a union of spoke and hub like a weld of fron. This same superiority and careful construction enters into every part of the Studebaker Wagon. Ask your nearest dealer for them. If not there, write us direct and we will inform you where you can get them in your locality.

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TOWER'S SURFACE CULTIVATORS,

stommed weeds, such as milk weeds, from weeds, that dodge the weeds, and the destruction of small weeds, and as for the same complete than with the slove of plow. — J. J. Farm Common Complete than with the slove of plow. — J. J. TEELATINE ON COLN CULTURE, and discount to in their weeks are called the same control of the same control of the same control of the same called the same

bere we have no agent. J. D. TOWER & BRO., 5th St., MENDOTA, ILL.

MRS. T. W. RAGSDALE, Paris, Mo., places her poultry ad. in this issue. Mrs. Ragsdale is one of the oldest breeders in the state. She has won prizes on her poultry for years, including World's Fair prizes at Chicago, 1838. Each breed is raised on separate farms, and kept strictly pure. Mrs. Ragsdale will be pleased to hear from any one wanting anything in her line, and will try to please you. To our old readers she needs no introduction, and to our new we can say Mrs. Ragsdale is thoroughly reliable. Look up her advertisement in this issue.

ROCKS exclusively for 18 years. Stool pure and bred from the best atrains. Egg \$1,25 for 15, \$2,00 for 30. Satisfaction guaranteed Mrs. M. A. COTTEN, Knox City. Mo. RODS For locating gold and silver, lost treasures.
TEXAS ROD Co., Box 184, M., Dalias, Texas.

BRAHMAS exclusively; Eggs \$1.00 per 18
M. B. Turkey eggs \$2.00 per 10.
Mrs. C. S. BOHRER, Vandalia, Mo.

EXPRESS PAID on eggs by giving extra num ber, 31 years in the pure bred poultry business have shipped fowls and eggs to almost ever State. Mrs. E. Griffith, Calumet, Pike Co., Mo.

MY SMALL FLOCK

Wallace Kirkpatrick,

WOLCOTT, KANS.

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GET OUR FREE LIST of Farm Bargs outural, Mineral, Ocal and Timber Land il Lincoln Trust Building, 8t. Louis,

160 ACRES Irrigassed Alfaira land, 180 bearing fruit trees, good house. Barn, stook sheek, 60 acres well set in Alfaira, good seighborhood in Western Kanasa forgi,000. If you want good dimake, control and prosperity, sry the stook business in Western Kanasa, where cane, fall: core, Affaira can destile or these will carried to the core of th

Read "The Corn Belt," a handsome monthly paper, beautifully illustrated, containing exact and truthful informa-tion about farm lands in the West. Send 25 cepts in postage stamps for a year's subscription to THE CORN BELT, 209 Adams St., Chicago.

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One of the best farms in Grant Co., O. T., 90
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Partition sale of farms, in the oldest and best residence parts of state, Marion and Balls counts, all fine improved farms, with living water, best shurches and schools to be found; sig, sight said ten miles from H. & St. Joe and M. K. & T. R. B.; travel roads and rural delivery; also telephone in crawler of the state of the sta HERRY DELL, Happibal Me

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